VisionMaster 17

SERVICE MANUAL

Model: MF-8617A
MF-8617A-T

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NOTICE

The information in this document is subject to change without notice.

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SAFETY PRECAUTION

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by mark ⚠ on the schematics and on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may create shock, fire, or other hazards.

4. Use isolation transformer when hot chassis.
   The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.

5. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.) To maintain the proper minimum level of soft X-ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

6. Isolation Check
   (Safety for Electrical Shock Hazard)
   After re-assembling the product always perform an isolation check on the exposed metal parts of the cabinet (video input and output terminals, control knobs, screwheads, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) Dielectric Strength Test
   The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1,000V AC(r.m.s.) for a period of one second. (Withstand a voltage of 1,000V AC(r.m.s.) to an appliance rated 120V or more, and 1,500V AC(r.m.s.) to an appliance rated 200V or more, for a period of one second.)
   This method of test requires a test equipment not generally found in the service trade.

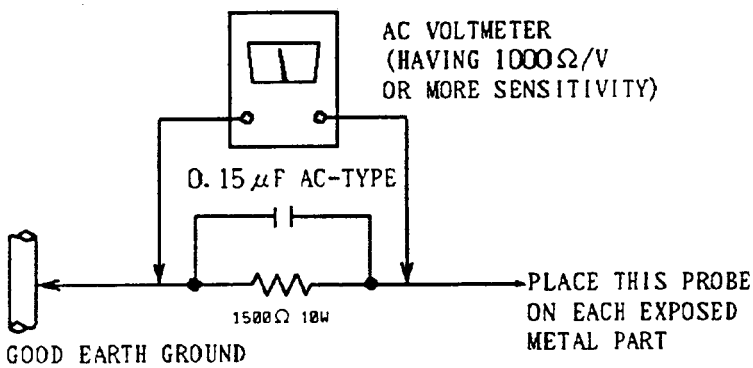
(2) Leakage Current Check

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 3.5mA AC(r.m.s.).

· Alternate Check Method

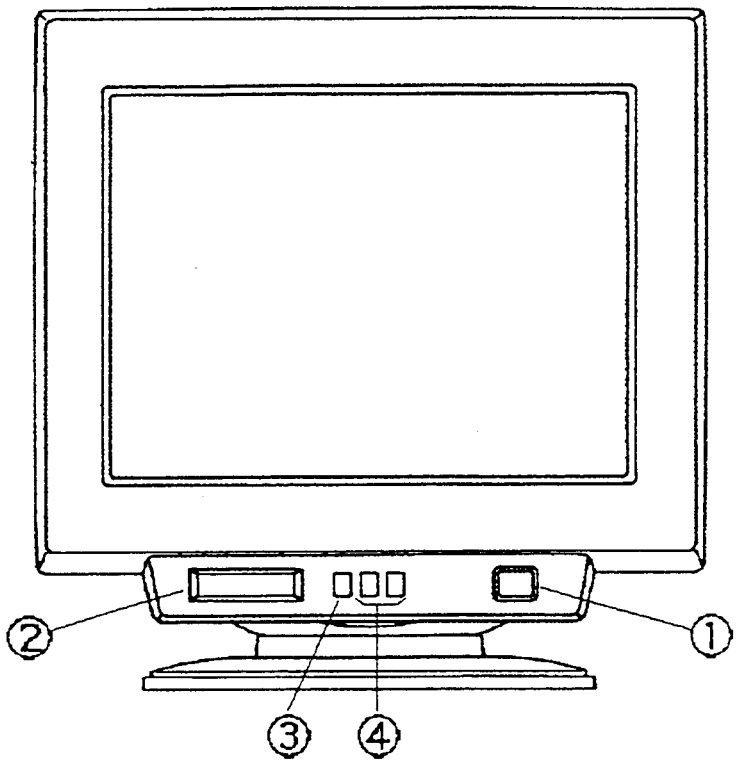
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.).

Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 2.45V AC(r.m.s.). This corresponds to 3.5mA AC(r.m.s.).



1. LOCATION OF BUTTONS AND CONNECTORS

1-1. FRONT



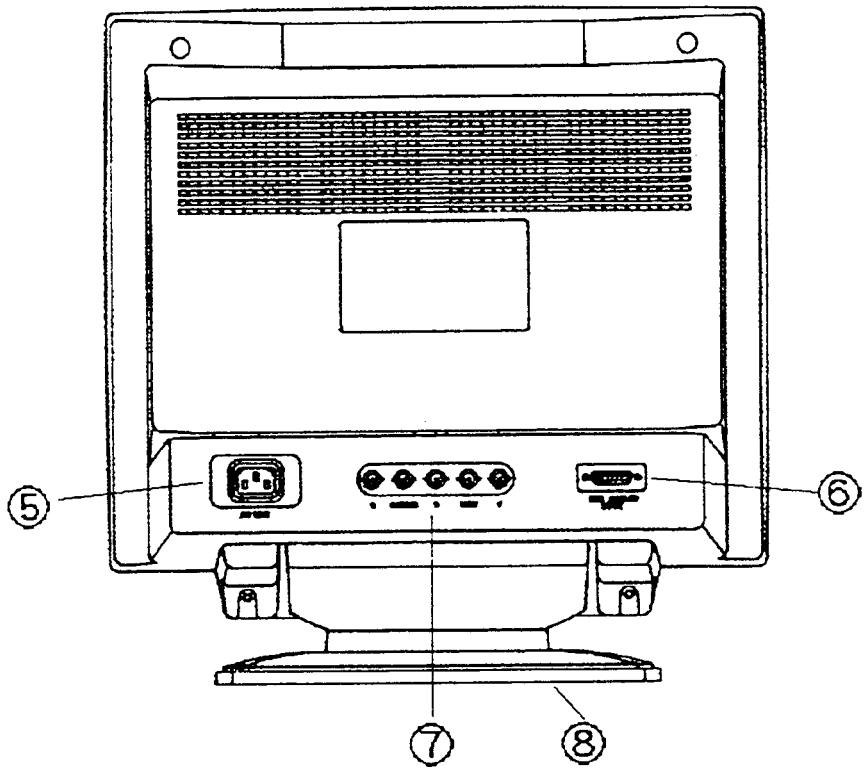
① POWER SWITCH (ON / OFF)
- Use to turn the power ON or OFF.
- Press the switch to turn ON and press it again to turn OFF.

② LCD PANEL
- Indicates status and menu type information.
- On power up a 'Welcome to Vision Master' message is displayed on the panel followed by an error message such as 'no signal' if the video cable is not connected.
- Once a signal is detected the display indicates the horizontal and vertical frequencies, the input; i.e. BNC or D-SUB and the signal select mode; AUTO for automatic.
- When making adjustments, a small gauge is displayed to indicate how much control you have given to a setting.
- The display's back lighting disappears after 20 seconds when no picture adjustment is made.

③ MENU BUTTON
- Press it to display a horizontally-scrollable list of adjustment options.
- When the adjustment item you wish to change is blinking, press it again to select it.

④ +/- BUTTON
- Use +/- pair to work through adjustment options.
- Use +/- pair to make adjustments.

1-2. REAR



⑤ AC INPUT CONNECTOR
- Connect to the AC outlet with the supplied AC power cord.

Note: - Make sure the POWER SWITCH is turned OFF before connecting the power cord.

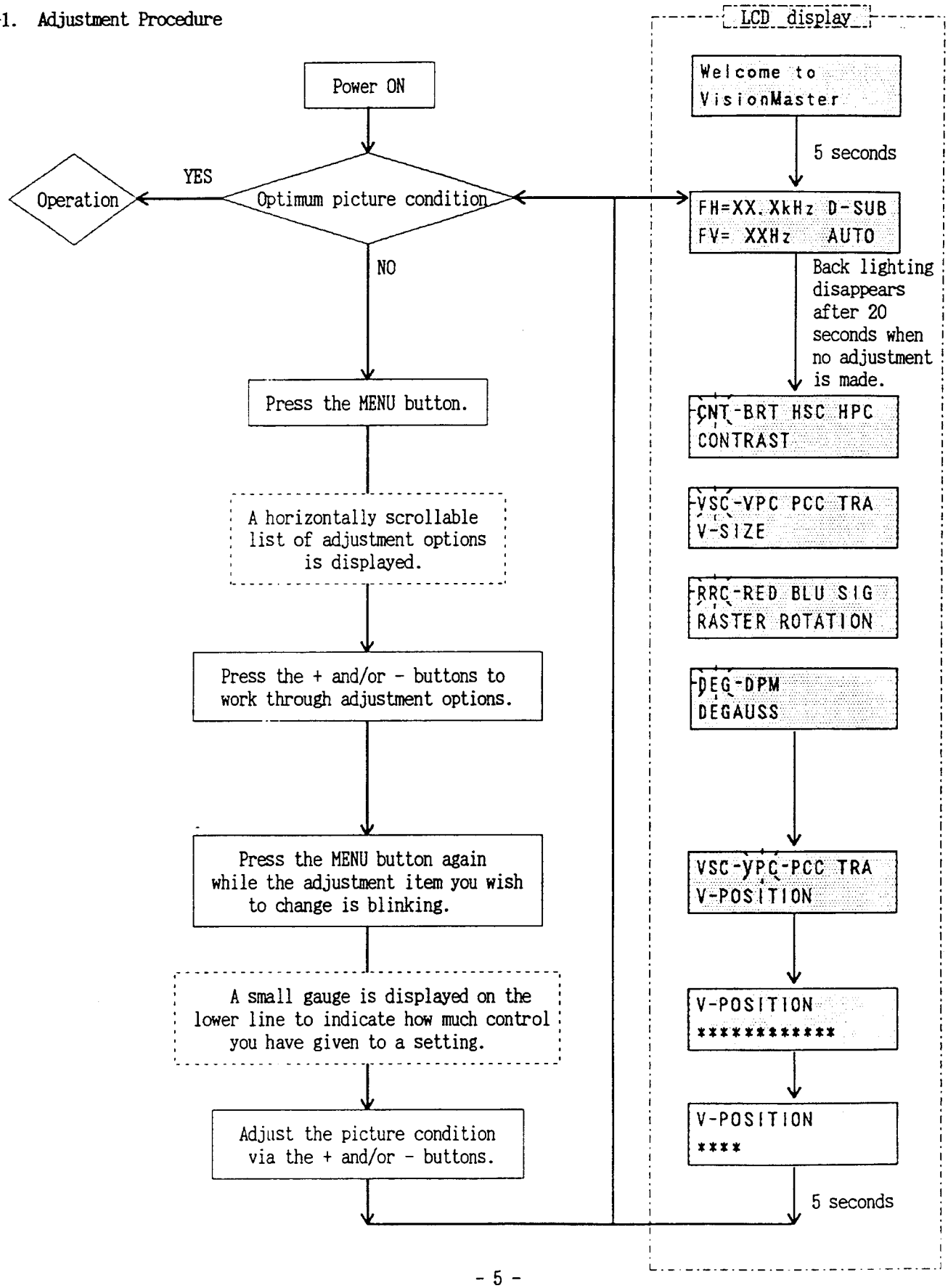
⑥ 15PIN D-SUB SIGNAL INPUT CONNECTOR
- Allows an equipment having analog RGB output to be connected.

⑦ BNC SIGNAL INPUT CONNECTORS
- Allows an equipment having analog RGB output to be connected.

⑧ TILT & SWIVEL STAND
- Allows the screen angle to be adjusted by 90 degrees horizontally, 15 degrees up and 5 degrees down.

2. OPERATING THE MONITOR

2-1. Adjustment Procedure

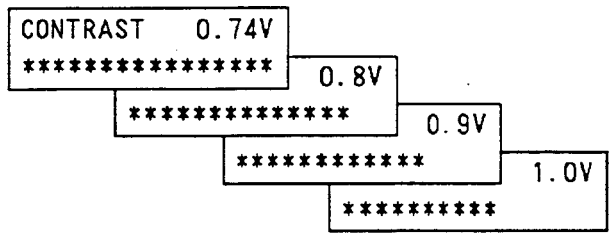


Notes: 1. The picture settings are automatically stored to one of the 27 available user definable channels including 6 factory presets after about five seconds.
2. If you make any changes on the picture condition when receiving the preset signal timing, the factory-preset data will be erased and the modified one stored. The factory-preset data can be restored by the special function; factory-preset data restoration.

2-2. Adjustment Items

CNT: CONTRAST CONTROL

- Adjusts the picture contrast.
- In adjusting the contrast, the four different voltages of video signals will appear indicating recommended maximum contrast for each voltage. It is recommended to use the monitor within the maximum contrast range according to the video signal voltage of your graphics card.



BRT: BRIGHTNESS CONTROL

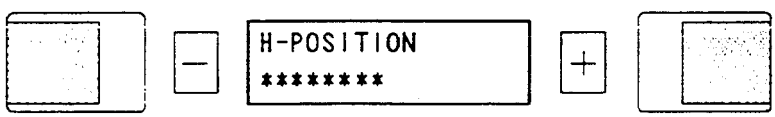
- Adjusts the picture brightness.
- 'CENT' appears when it reaches the middle of adjustment range. It is recommended to operate the monitor at this level for the best picture.

HSC: H-SIZE CONTROL

- Adjusts the horizontal size of the picture.

HPC: H-POSITION CONTROL

- Adjusts the horizontal position of the picture.



VSC: V-SIZE CONTROL

- Adjusts the vertical size of the picture.

VPC: V-POSITION CONTROL

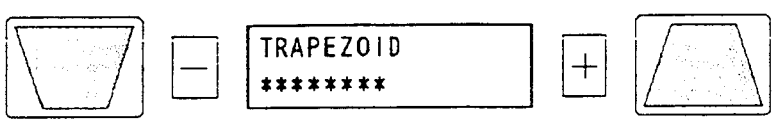
- Adjusts the vertical position of the picture.

PCC: PINCUSHION CIRCUIT CONTROL

- Corrects pincushion or barrel distortion and to produce straight vertical edges.

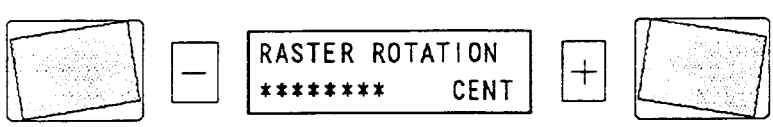
TRA: TRAPEZOID CONTROL

- Corrects trapezoid distortion and to produce parallel vertical edges.



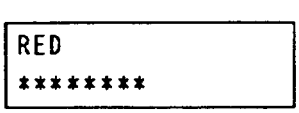
RRC: RASTER ROTATION CONTROL

- Corrects raster rotation or poor purity caused by magnetism when the monitor is swiveled while in operation.
- 'CENT' appears when it reaches the middle of adjustment range. It is recommended to operate the monitor at this level for the best picture.



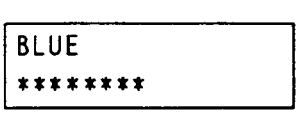
RED: RED TONE CONTROL

- Use to adjust the red tone in white.



BLU: BLUE TONE CONTROL

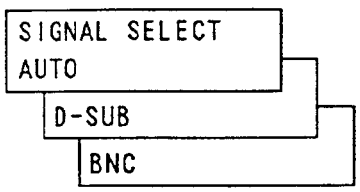
- Use to adjust the blue tone in white.



SIG: SIGNAL SELECT

- Select AUTO, D-SUB or BNC for the video input connector.
- When the AUTO is selected, the monitor automatically detects the presence of a video input and selects either D-SUB or BNC accordingly. If two video inputs are present then the BNC's takes priority.

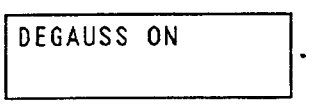
Note: The AUTO function doesn't operate when the display power management timer is set. Select the video input manually.



DEG: DEGAUSS

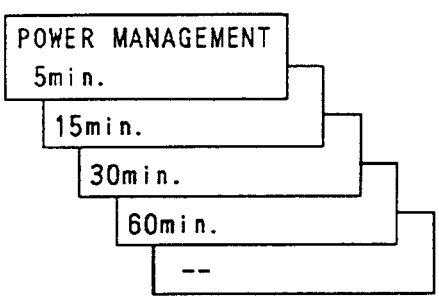
- If poor purity caused by swiveling or moving the monitor cannot be corrected with the RRC adjustment, then select the degauss to cancel magnetism.

Note: Degauss occurs automatically on power on and it is best to leave 30 minutes between each degauss operation.



DPM: DISPLAY POWER MANAGEMENT

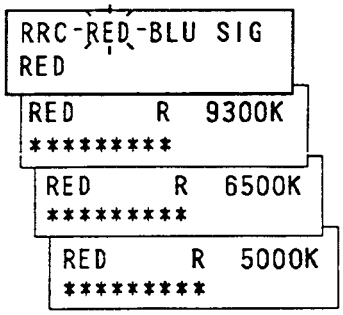
- Select 5, 15, 30, 60 minutes or off (--) for an interval to power down, and power consumption drops to 15W or less at stand-by state and to 7W or less at suspend state.
- The present power management state is indicated on the LCD display, 'STAND-BY' with half brightness back lighting and 'SUSPEND' with back lighting off.
- To return to normal operation, the keyboard or mouse needs to be touched.



2-3. Special functions

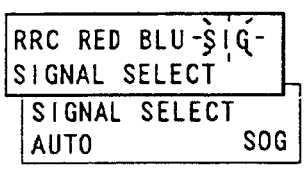
Color temperature selection

- The color temperature of white will be selected by pressing the MENU button for 5 seconds while 'RED' or 'BLU' is blinking. The three different values will be selected in turn each time this operation is repeated.



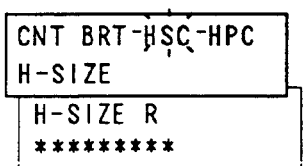
SOG (Sync On Green) selection

- When the screen is too bright or green because of receiving other sync signals with sync on green signal, press the MENU button for 5 seconds while 'SIG' is blinking so that 'SOG' will appear. To cancel the function, repeat this operation and the 'SOG' disappears.



Factory-preset data restoration

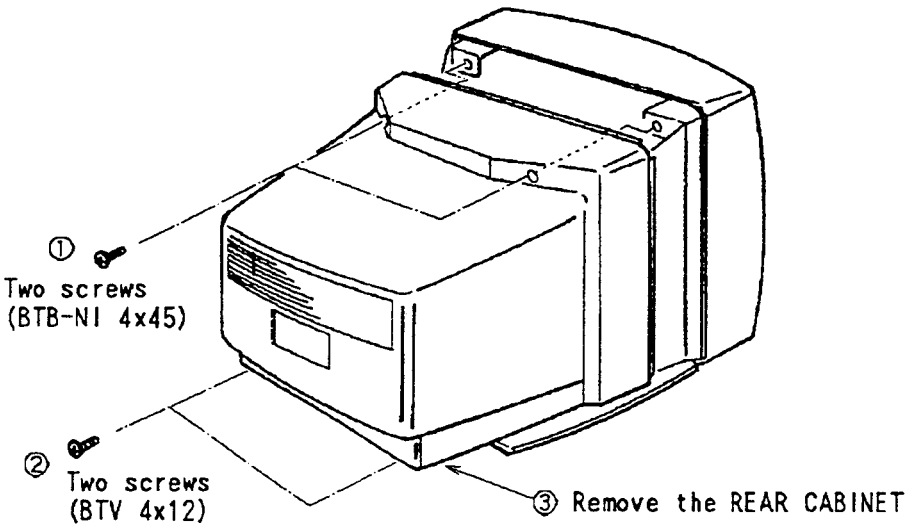
- This is a special function to restore the factory-preset data of the picture condition. Keep pressing the MENU button for 5 seconds while 'HSC' is blinking. Then 'R' appears and the factory-preset data returns. The picture conditions for signals excluding the preset timings remain the same.



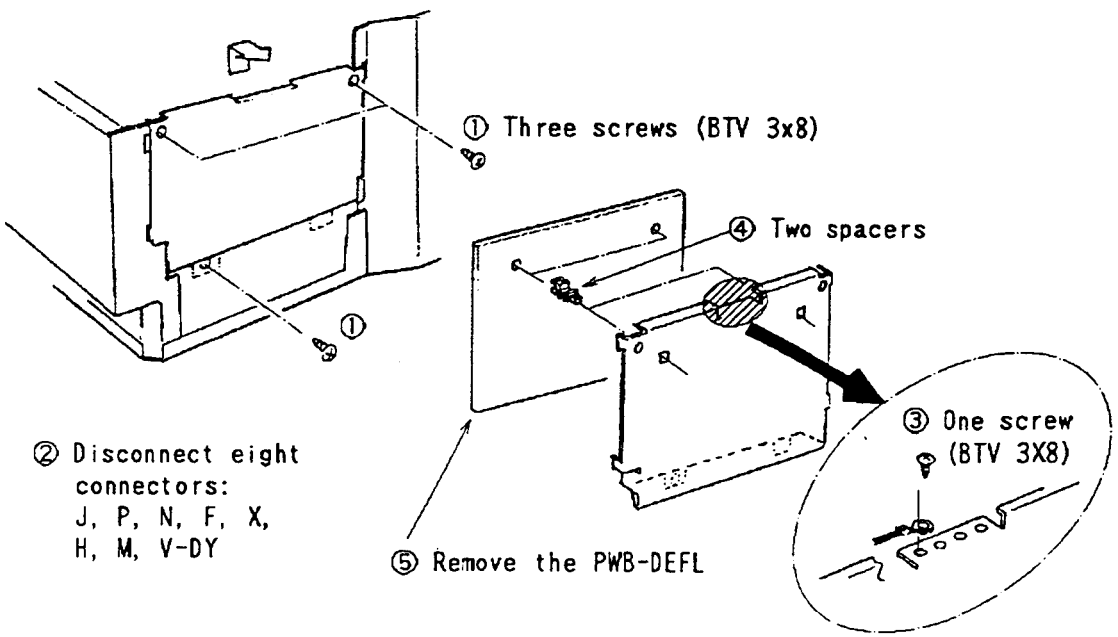
3. DISASSEMBLY

Numbers in circles present procedure to do.

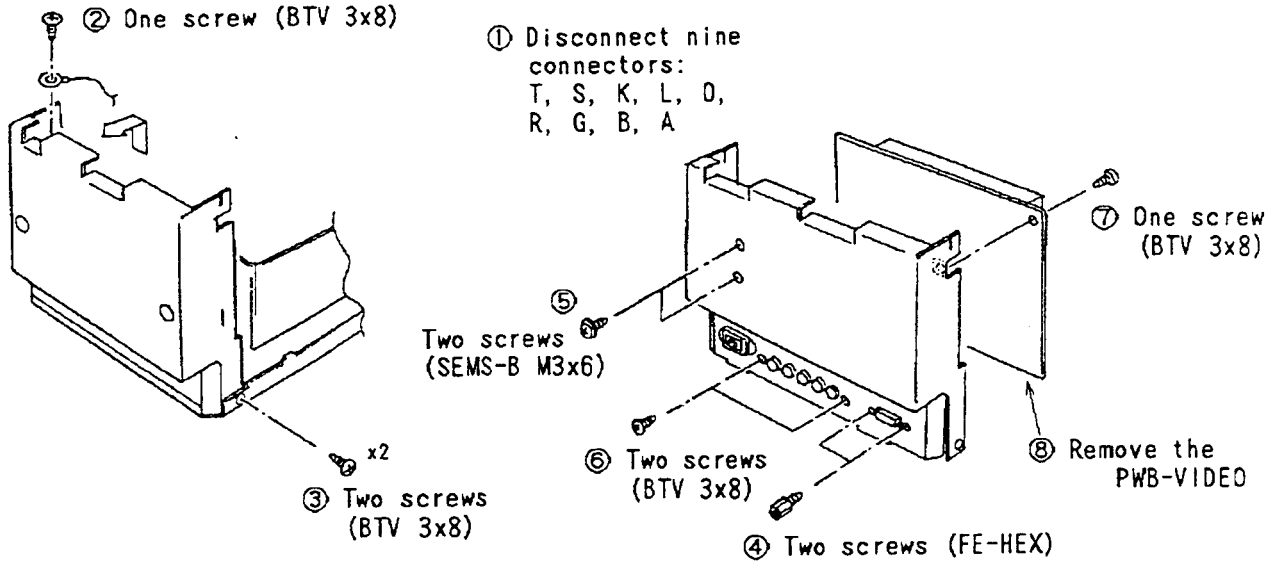
3-1. REAR CABINET removal



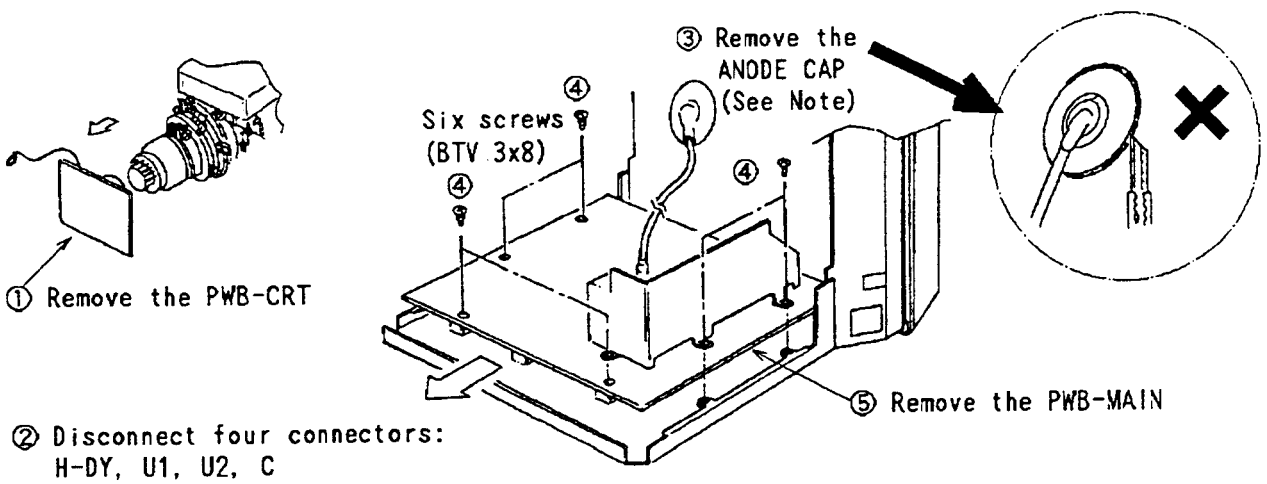
3-2. PWB-DEFL removal



3-3. PWB-VIDEO removal

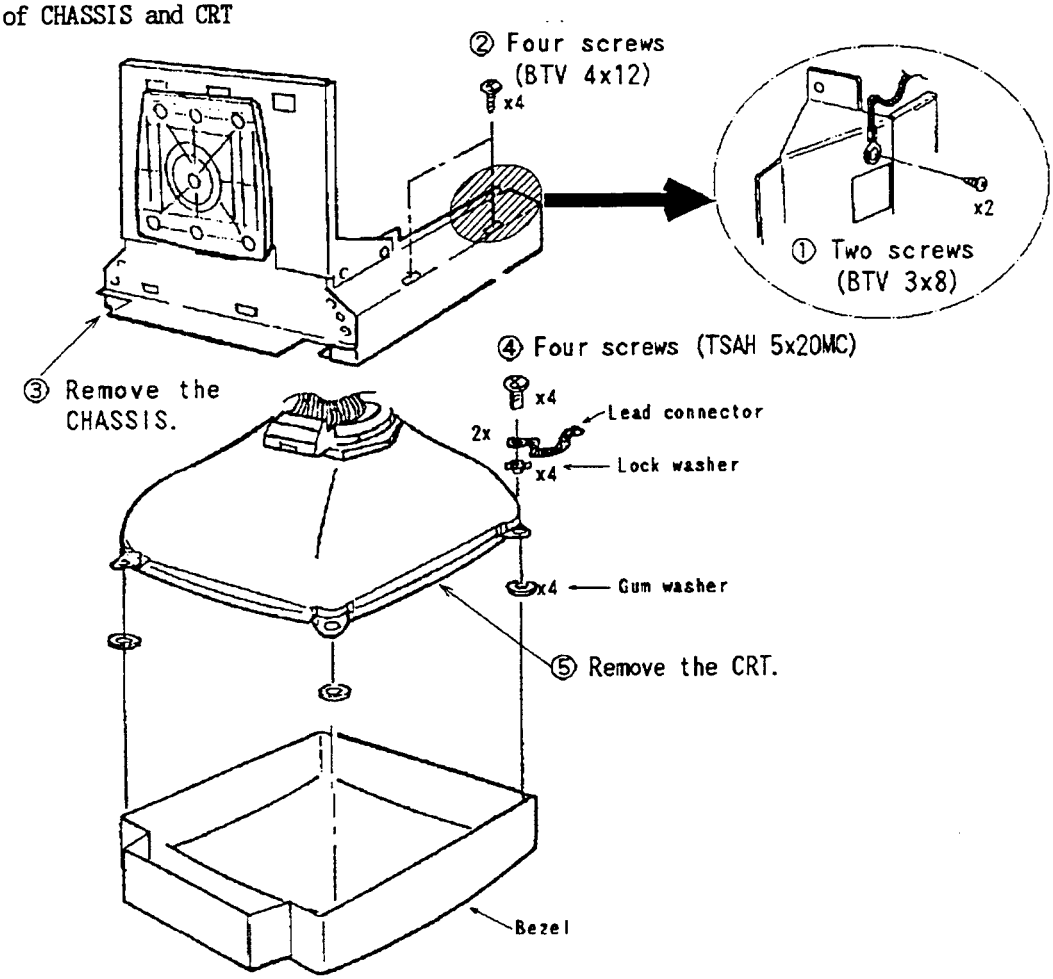

② One screw (BTV 3x8)
① Disconnect nine connectors: T, S, K, L, D, R, G, B, A
⑦ One screw (BTV 3x8)
⑤ Two screws (SEMS-B M3x6)
x2
③ Two screws (BTV 3x8)
⑥ Two screws (BTV 3x8)
⑧ Remove the PWB-VIDEO
④ Two screws (FE-HEX)

3-4. PWB-MAIN removal


③ Remove the ANODE CAP (See Note)
④ Six screws (BTV 3x8)
④
④
① Remove the PWB-CRT
⑤ Remove the PWB-MAIN
② Disconnect four connectors: H-DY, U1, U2, C

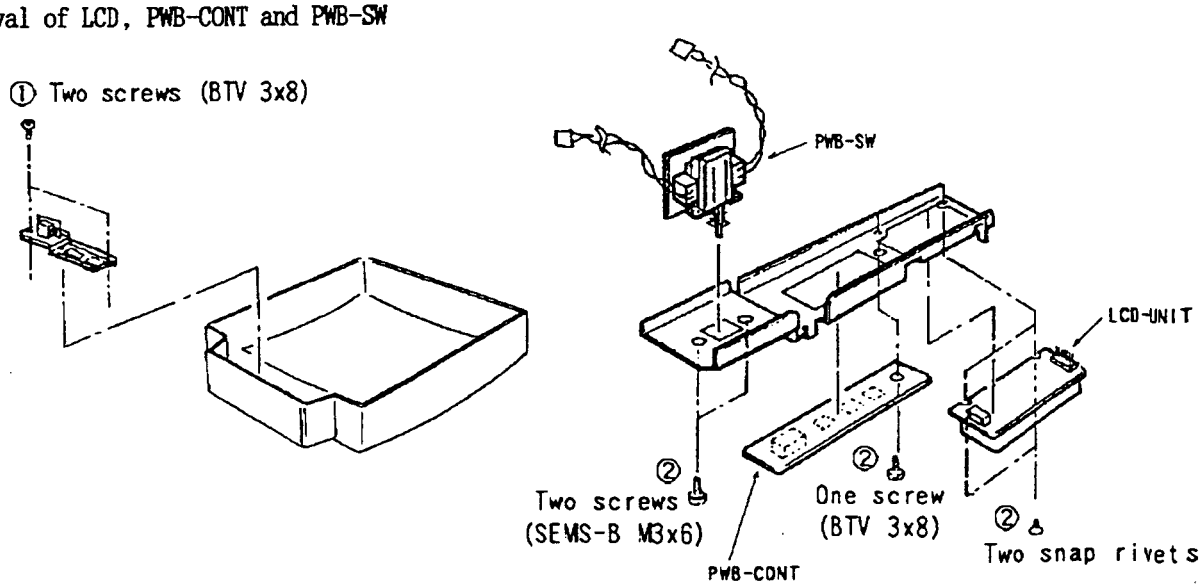
Note: Wait at least one minute after turning the power off to remove the anode cap. Separate the silicone rubber adhered around the anode cap carefully with a bamboo spatula or the like. Do not hurt the surface of anode cap or CRT with sharp-shaped material such as a cutter.

3-5. Removal of CHASSIS and CRT



Note: On reassembling, the washers must be put back to the same location as before the disassembly. When temporarily securing two diagonal screws to fix the CRT, make sure no tilt is visible from the front and the CRT is fixed in the horizontal and vertical center. Then, secure all screws including the two secured temporarily.

3-6. Removal of LCD, PWB-CONT and PWB-SW



4. CIRCUIT DESCRIPTION

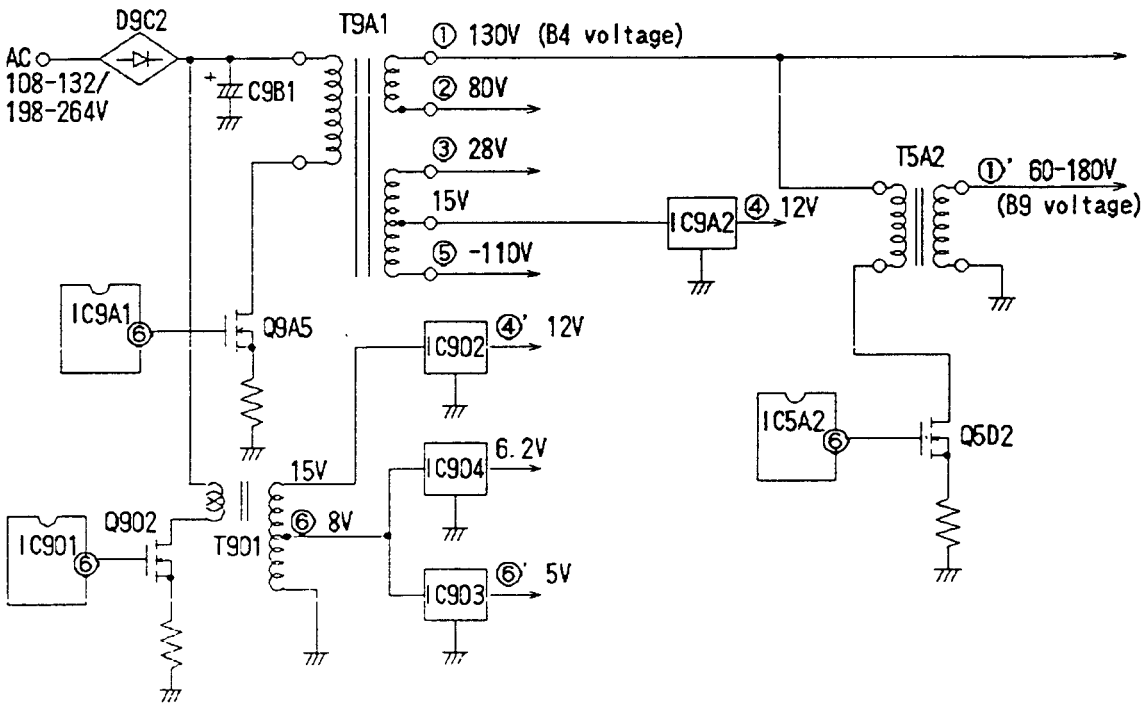
< IC Application >

Circuit	Ref No.	Description	Application
Video	IC201	M52327SP	Video amplifier
	IC203	VPS10	Video output
Deflection	IC301	LA7858	Horizontal oscillation
	IC302	LM324	RRC control
	IC303	LM324	Pin balance and Parallelogram control
	IC401	TDA1675A	Vertical oscillation and output
	IC402	4558	Vertical raster width control
	IC403	M5109	V-DBF-AGC
	IC5A1	LM324	High voltage control,Feedback control
	IC501	LM324	Buffer
	IC502	LM324	Amplifier(H-size, Distortion control)
	IC503	LM324	Amplifier(Distortion control, Buffer)
	IC504	BA6110	Distortion control
	IC505	BA6110	Distortion control
	IC506	BA6110	Distortion control
	IC507	74LS123	AFC pulse width keep
	IC508	M5109	H-DBF-AGC
	IC509	BA6110	Distortion control
Synchronization	IC202	74LS157	Sync signal switching (D-SUB/BNC)
	IC809	M52036SP	Sync signal processing
	IC811	74LS123	Clamp pulse width keep and switching
Power	IC5A2	3842	Variable B control
	IC810	78L05	5V regulator
	IC9A1	3842	Main power control
	IC9A2	7712	12V regulator
	IC901	3842	Sub-power control
	IC902	7812	12V regulator
	IC903	7705	5V regulator
	IC904	SI3050CA	6V regulator
	IC905	M51953	Sub-power voltage watcher
Microprocessor	IC801	263Z273-20	Microprocessor
	IC802	M62358	D/A converter
	IC803	AT93C66	E^2PROM (memory)
	IC804	74HC74	Counter
	IC805	LM393	Comparator
	IC806	74HC14	Inverter
	IC807	74HC393	Counter

4-1. POWER SUPPLY circuit

After passing through the filter section of L9A1 and L9A2, AC voltage is rectified by D9C2 and C9B1. The rectified voltage is divided as follows: One is switched by IC9A1 and Q9A5 and then supplied to T9A1 primary. The T9A1 does not work at stand-by/suspend state. The other is switched by IC901 and Q902 and then supplied to T901 primary. These secondaries provide the following DC voltages:

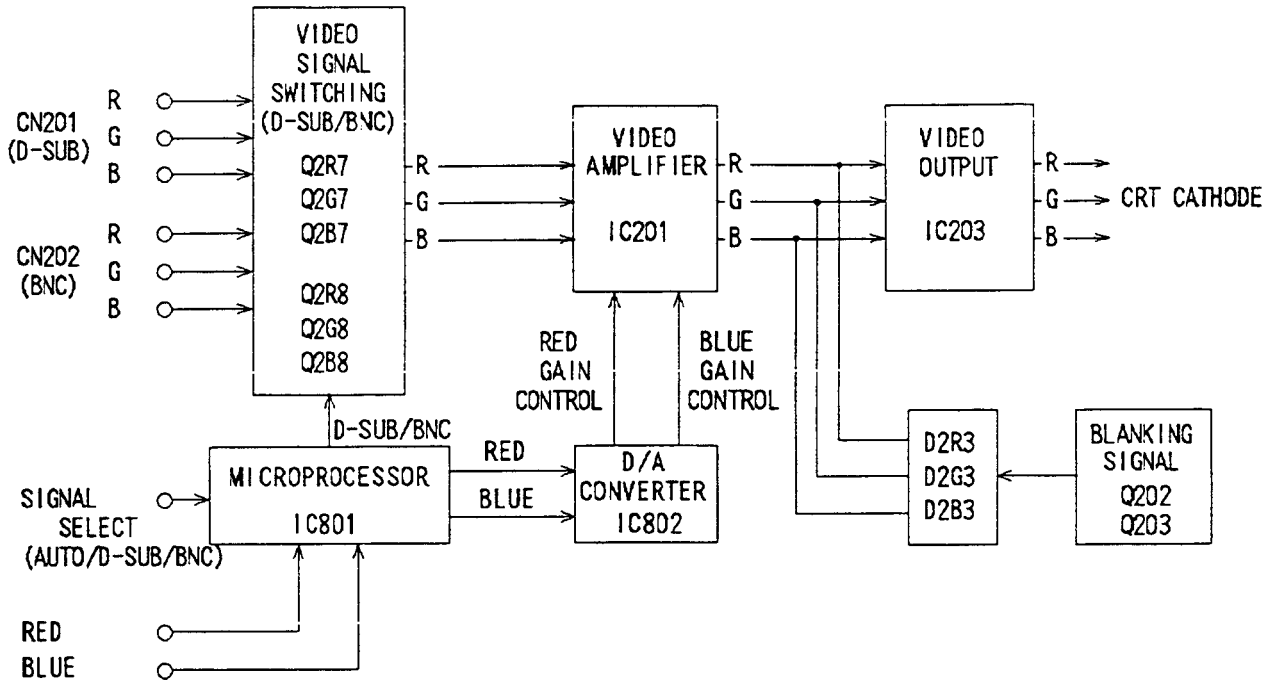
① B4 voltage (130V):	Supplied to the HORIZONTAL DEFLECTION OUTPUT and the HIGH VOLTAGE OUTPUT circuits as drive voltage, to the VIDEO OUTPUT circuit as cut off voltage and also to the FBT as beam current.
①' B9 voltage (60-180V):	The B4 voltage is switched by IC5A2 and Q5D2, and then supplied to the HORIZONTAL DEFLECTION OUTPUT and the HIGH VOLTAGE OUTPUT circuits as power source.
② 80V line:	Supplied to the VIDEO OUTPUT circuit as power source.
③ 28V line:	Supplied to the VERTICAL DEFLECTION OUTPUT and the VERTICAL POSITION circuits as power source.
④ 12V line:	The 15V is regulated to 12V by IC9A2 and supplied to the HORIZONTAL OSCILLATION, DISTORTION CORRECTION and DBF circuits as power source.
④' 12V line:	The 15V is regulated to 12V by IC902 and supplied to the SYNC SIGNAL circuit and MICROPROCESSOR including its peripheral circuits as power source.
⑤ -110V line:	Supplied to control the G1 grid of the CRT.
⑥ 8V line:	The 8V is regulated to 6.2V by IC904 and supplied to the CRT heater as power source.
⑥' 5V line:	Divided line from the 8V line is regulated to 5V by IC903 and supplied to the VIDEO and SYNC SIGNAL and the MICROPROCESSOR circuits as power source.



DEGAUSS circuit
As K9A1 is turned on when the power on, the degauss current flows through degauss coil and RP9A1 to degauss the CRT. After approx. 10 seconds from power on, K9A1 is turned off automatically. As for manual degauss by the adjustment item of DEGAUSS (DEG), the degauss is performed in the same way.

4-2. VIDEO SIGNAL circuit

The video signal from CN201 or CN202 is terminated to 75Ω and applied to the VIDEO SIGNAL SWITCHING circuit. MICROPROCESSOR (IC801) controls this circuit and performs the input signal selection, either D-SUB or BNC, by the adjustment item of SIGNAL SELECT (SIG). After the selected signal is amplified by IC201, the respective RGB outputs add the blanking signal and are applied to IC203.

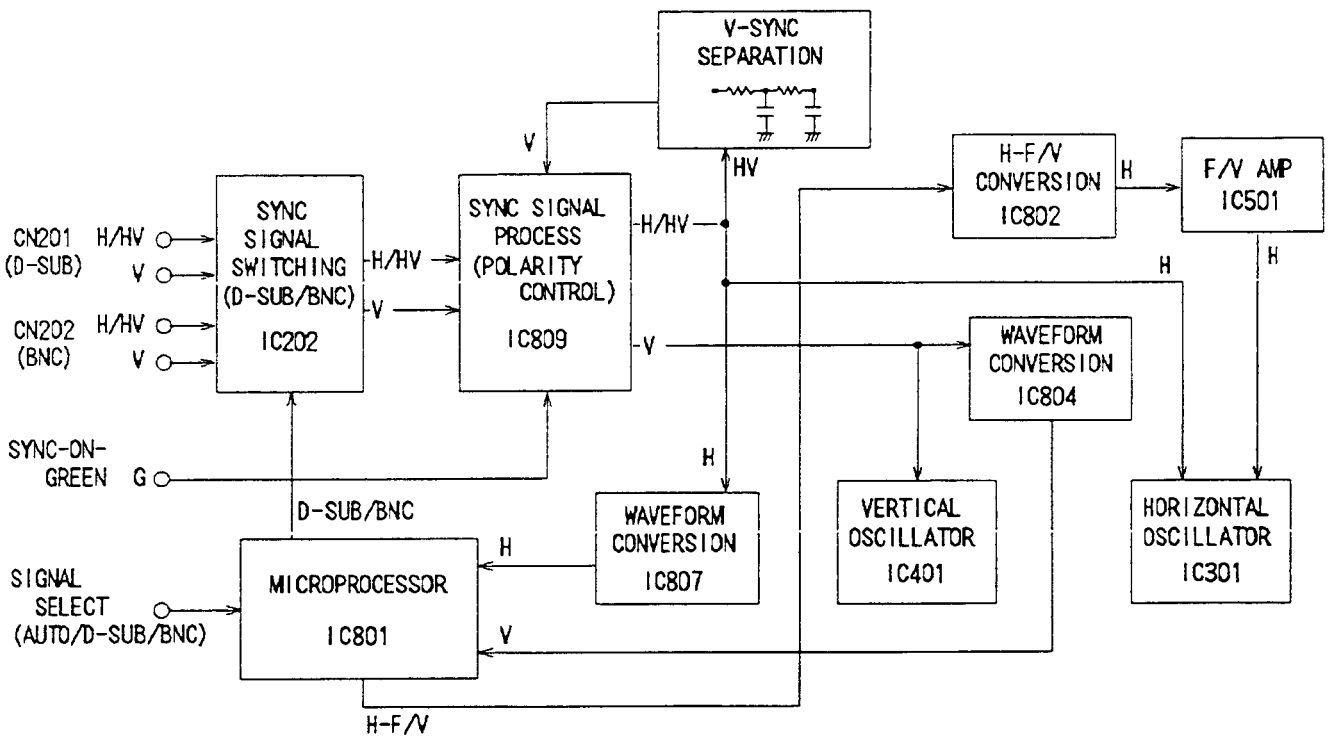


4-3. VIDEO OUTPUT circuit

The video signal is amplified to about 50Vp-p by IC203, and then fed to the respective CRT cathodes, KR, KG and KB.

4-4. SYNC SIGNAL circuit

The sync signal from CN201 or CN202 is applied to IC202. The adjustment item of SIGNAL SELECT (SIG) selects an input connector and IC801 controls and switches pin ① of IC202 to "LOW" for D-SUB or "HIGH" for BNC. The selected sync signal goes to IC809 that maintains positive polarity. As for separate sync input, the signal is output as it is with positive polarity. As for sync on green or composite sync input, the composite sync signal from IC809 is sent to V-SYNC SEPARATION circuit. The separated vertical sync signal is fed back to IC809 and output. The vertical sync signal with positive polarity is applied to IC804 and converted to the waveform with double the period of one cycle. The horizontal sync signal from IC809 is converted to the waveform with 256 times as long as one cycle period by IC807. Then these sync signals are applied to IC801 and used as a reference signal.



4-5. SYNC SIGNAL DISCRIMINATION circuit

IC809 outputs the following sync signals; positive sync signal (Hs, Vs), sync polarity signal (Hpol, Vpol), sync state signal (Hstate, Vstate). These signals are applied to IC801 and determined whether they have the same data as the ones memorized in IC803.

--- Same case ---

The preset data is taken out from IC803 and the respective control voltages are output.

--- Different case ---

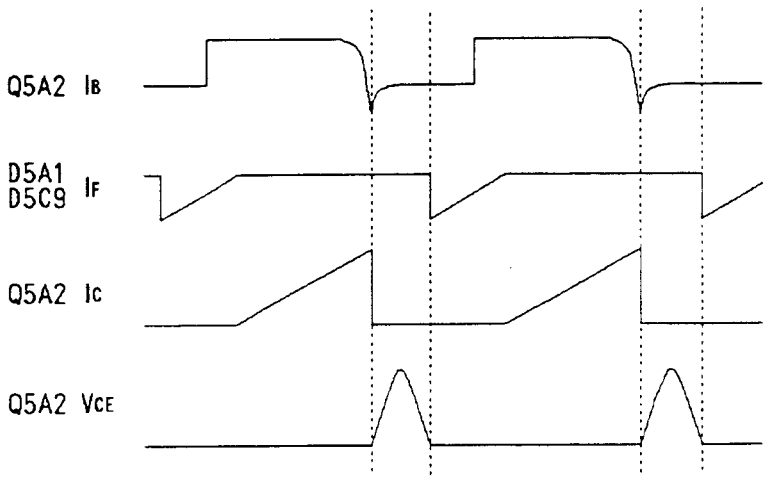
The respective control voltages are output by being estimated from the preset timing closest to the input horizontal frequency.

Under the following conditions, pin ㊼ (blanking terminal) of IC801 turns "HIGH", pin ⑮ (brightness terminal) of IC201 "LOW" and the picture is disappeared.

1) No horizontal sync signal
2) No vertical sync signal
3) Horizontal frequency is less than 27kHz or more than 87kHz
4) Vertical frequency is less than 50Hz or more than 120Hz
5) When the monitor protection output terminal (M-PRO), pin ㊻ of IC801 turns "HIGH"

4-6. HORIZONTAL OSCILLATION and DEFLECTION circuits

The f/V converted voltage is fed to pin ⑨ of IC301 and controls the horizontal oscillation frequency. The rectangular wave from pin ⑬ of IC301 is current-amplified by Q302 and fed to base of Q5A2 and then supplied to the horizontal DY as sawtooth wave current. Horizontal deflection is performed by the magnetic field generated when supplying the current to the horizontal DY.



4-7. HIGH VOLTAGE OUTPUT CONTROL circuit

The voltage from pin GR of T5A1 is proportional to the high voltage (anode voltage). The voltage is applied to pin ⑥ of IC5A1 and improves dynamic regulation by applying the output voltage from the pin ⑦ to the base of Q5E1. The output voltage from collector of Q5E1 is compared to the input voltage to the emitter and then the output voltage is applied to IC5A2. When input horizontal frequency changes, the B9 voltage accordingly changes between 60 and 180V to keep the high voltage stable.

4-8. VERTICAL OSCILLATION and DEFLECTION circuits

Vertical deflection is performed by the magnetic field generated when supplying the sawtooth current produced in IC401 to the vertical DY.

4-9. S-CORRECTION CAPACITOR SWITCHING circuit (CS SWITCHING POINTS)

CS switching is performed by selecting the S-correction capacitors corresponding to the input horizontal frequency.

fH	IC801 output pin					CS switching transistor			
(kHz)	64	61	60	62	58	Q5A7	Q5A8	Q5A9	Q5B1
27.0 - 34.0	L	L	L	L	L	ON	ON	ON	ON
34.0 - 41.0	H	L	L	L	L	OFF	ON	ON	ON
41.0 - 52.0	H	H	L	L	L	OFF	OFF	ON	ON
52.0 - 59.0	H	H	H	L	L	OFF	OFF	ON	ON
59.0 - 70.0	H	H	H	H	L	OFF	OFF	OFF	ON
70.0 - 87.0	H	H	H	H	H	OFF	OFF	OFF	OFF

4-10. DYNAMIC FOCUS circuit

The parabolic wave from the HORIZONTAL OUTPUT circuit is applied to pin ⑪ of IC508. The sawtooth wave from the VERTICAL OUTPUT circuit is applied to pin ⑪ of IC403. Each waveform is wave-rectified and output as a parabolic wave. After amplified, these horizontal and vertical parabolic waves are applied to pin DF of T5A1 and added to the focus voltage from T5A1. The focus voltage is fed to the CRT so as to provide good focus at corners of the screen.

4-11. HORIZONTAL SIZE circuit (HSC)

Applying the DC voltage (0-12V) from pin ⑭ of IC802 to pin ⑨ of IC502 controls the horizontal size. Also, the horizontal size to the horizontal frequency is controlled by applying the voltage according to the horizontal frequency to pin ⑤ of IC502.

4-12. HORIZONTAL POSITION circuit (HPC)

Applying the DC voltage (0-12V) from pin ⑮ of IC802 to pin ② of IC301 controls the horizontal position. Also, the horizontal position to the horizontal frequency is controlled by applying the voltage according to the horizontal frequency to pin ② of IC301.

4-13. VERTICAL SIZE circuit (VSC)

Vertical size is controlled by applying the DC voltage (0-12V) from pin ⑯ of IC802 to pin ③ of IC402.

4-14. VERTICAL POSITION circuit (VPC)

Applying the DC voltage (0-12V) from pin ⑰ of IC802 to Q401, Q402 and Q406 controls the vertical position.

4-15. PINCUSHION CORRECTION circuit (PCC)

Side distortion is controlled by applying the DC voltage (0-12V) from pin ⑦ of IC802 to pin ④ of IC506.

4-16. TRAPEZOID CORRECTION circuit (TRA)

Trapezoid distortion is controlled by applying the DC voltage (0-12V) from pin ⑥ of IC802 to pin ④ of IC504.

4-17. RASTER ROTATION circuit (RRC)

The DC voltage (0-12V) from pin ⑨ of IC802 is applied to pin ⑥ of IC302. Q306-Q309 controls the current flowing to the RRC coil and adjusts the raster rotation by the DC voltage from pin ① of IC302.

4-18. RED, BLUE GAIN CONTROL circuits (RED, BLU)

Red and blue gain terminals, pins ③ and ⑪ of IC201 are controlled by the DC voltages (0-12V) from pins ④ and ⑤ of IC802.

4-19. DISPLAY PWOER MANAGEMENT circuits (DPM)

4-19-1. NUTEK

1) STAND-BY state

The video signal is applied to IC805 via Q704 and Q705. The IC805 discriminates the presense of video signal. When receiving no signal for 3 minutes, pin ㉓ of IC801 turns "HIGH" level from "LOW" and controls the main power through Q906, PC901 and Q9B7. IC9A1 stops operating so that the power consumption is 15W or less and 'STAND-BY' with half brightness back lighting is indicated on the LCD display.

2) SUSPEND state

The pin ㉒ of IC801 turns "HIGH" level from "LOW" when the stand-by timer is over. The power of IC904 is turned off by Q905 so that the power consumption is 7W or less.

4-19-2. VESA DPMS

1) STAND-BY state

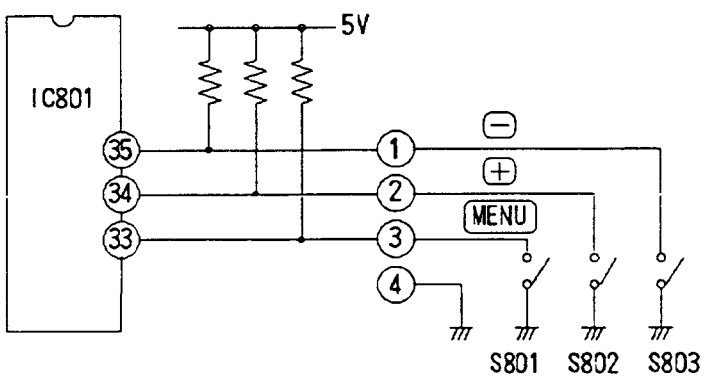
When receiving no horizontal sync signal for 6 seconds, pin ㉓ of IC801 turns "HIGH" level from "LOW". The power consumption is 15W or less.

2) SUSPEND state

When receiving no vertical sync signal for 6 seconds, pin ㉒ of IC801 turns "HIGH" level from "LOW". The power consumption is 7W or less.

4-20. ADJUSTMENT CONTROL

Pressing S801(MENU), S802(+) and S803(-) makes voltage at pins ㉝, ㉞, ㉟ "LOW" level respectively, and enables to select an adjustment item and to perform each adjustment.

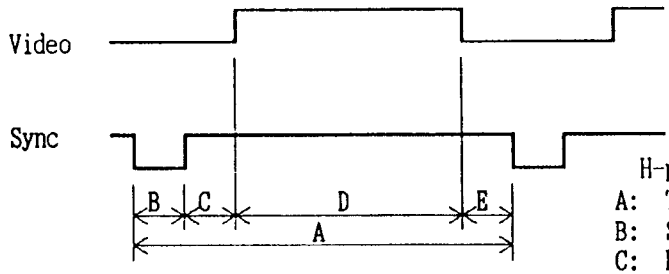


4-21. X-RAY PROTECTION circuit

When the output voltage from pin ⑤ of T5A1 exceeds the zener voltage at D5B7, PC9A1 will be turned on to stop the power oscillation so that X-ray radiation can be prevented.

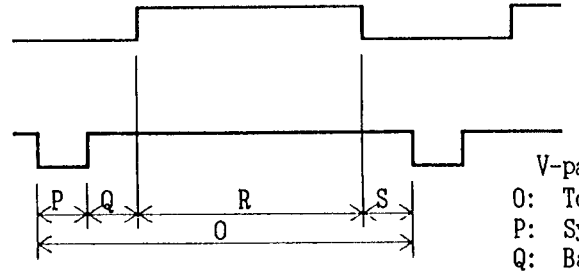
5. PRESET TIMING CHART

< Horizontal >



H-parameters
A: Total period
B: Sync. width
C: Back porch
D: Active video
E: Front porch

< Vertical >

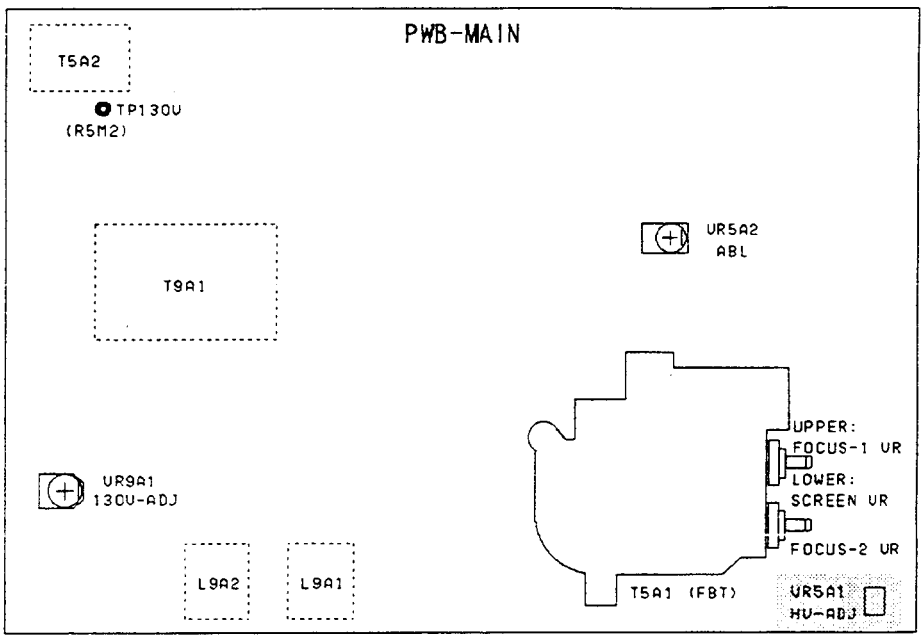


V-parameters
O: Total period
P: Sync. width
Q: Back porch
R: Active video
S: Front porch

Pre-set mode	fH (kHz)	Resolution	Sync polarity			Sync on green	Horizontal (μsec)					Vertical (msec)				
			H	V	Comp		A	B	C	D	E	O	P	Q	R	S
1	31.47	640×480 60Hz VGA	N	N	-	-	31.78	3.81	1.91	25.42	0.64	16.684	0.064	1.048	15.254	0.318
2	37.86	640×480 72Hz VGA	N	N	-	-	26.41	1.27	4.05	20.26	0.83	13.733	0.079	0.740	12.677	0.237
3	48.10	800×600 72Hz S-VGA	P	P	-	-	20.79	2.40	1.28	15.99	1.12	13.887	0.125	0.477	12.516	0.769
4	56.47	1024×768 70Hz XGA	N	N	-	-	17.71	1.81	1.93	13.63	0.34	14.274	0.106	0.514	13.601	0.053
5	64.31	1280×1024 60Hz (CAD)	-	-	-	○	15.55	0.97	2.25	11.94	0.39	16.560	0.016	0.529	15.922	0.093
6	78.86	1280×1024 74Hz (CAD)	N	N	-	-	12.68	1.07	1.90	9.47	0.24	13.491	0.038	0.469	12.984	0

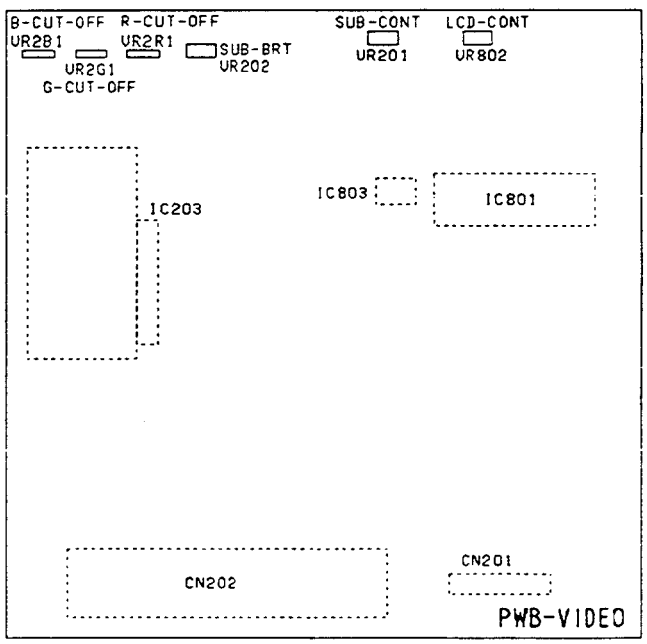
6. ADJUSTMENT VOLUME LOCATION

6-1. Main Board

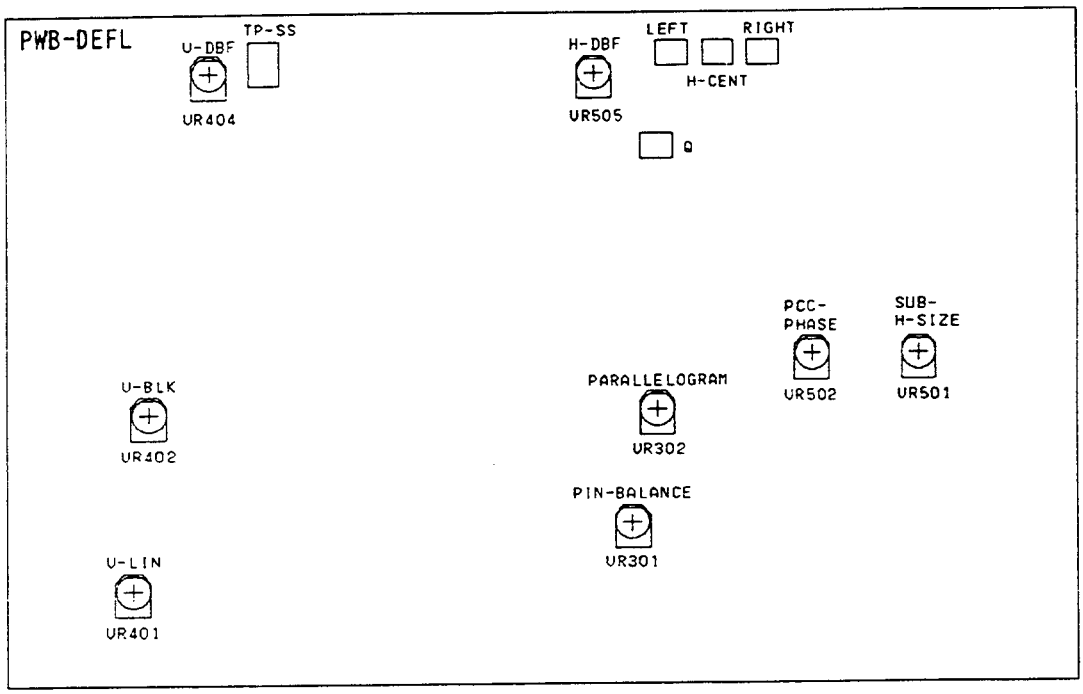


WARNING !
The adjustment volumes identified by [redacted] have been carefully factory-adjusted for each unit in order to satisfy regulations regarding X-radiation. Further adjustments on these volumes shall not be performed.

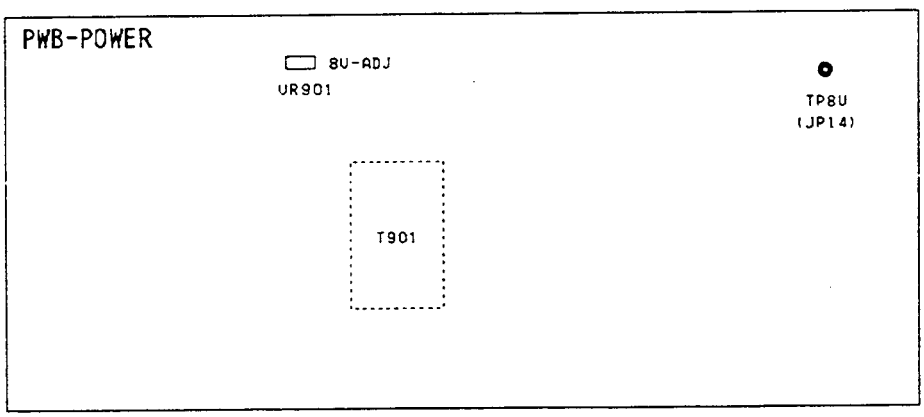
6-2. Video Board



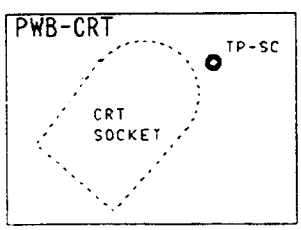
6-3. Deflection Board



6-4. Power Board



6-5. CRT Board



7. SET-UP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

< Required measuring equipment >

* Signal generator (Programable video generator) ···· Leader LVG-1604A
* DC voltmeter (300V DC range)
  Note: Digital multimeter can also be used.
* High voltage probe (0-30kV DC)
* Color analyzer ····· Minolta CA-100
* Luminance meter ····· Minolta nt-1°P
* Scale (Two 50cm scales put together so that no visual aberration occurs.)
* Frequency counter
* Digital wattage meter
* Oscilloscope (100:1 Low capacity probe)
* Degausser

< Preparation >

1. Place the monitor without tilting.
2. Connect the signal cable from the signal generator to the monitor.
3. Face the CRT screen to east so as not to be influenced by magnetic force.
4. Turn on the POWER switch, and degauss the entire screen with degausser.
5. Perform adjustment by setting the brightness to center and the contrast to maximum, except where specifically indicated.
6. Perform adjustment after a warm-up of at least 30 minutes.

Notes: 1) See Chapter 3 concerning disassembly for the set-up adjustments.
2) This monitor should be checked and adjusted by connecting it to a signal generator, then entering and running the timing charts both below and of Chapter 5.

fH(kHz)	Sync polarity			Sync on green	Horizontal (μsec)					Vertical (msec)				
	H	V	Comp		A	B	C	D	E	O	P	Q	R	S
24.8	N	N	-	-	40.27	3.04	3.99	30.39	2.85	17.719	0.322	1.007	16.108	0.282
27.0	N	N	-	-	37.04	4.44	2.23	28.14	2.23	16.667	0.074	0.666	15.556	0.371
56.5	N	N	-	-	17.71	1.81	1.96	13.65	0.29	14.274	0.106	0.514	13.601	0.053
57.5	N	N	-	-	17.39	1.20	2.38	13.17	0.64	16.659	0.070	0.347	16.121	0.121
85.0	N	N	-	-	11.76	1.19	1.43	8.70	0.44	16.663	0.047	0.587	15.994	0.035
85.5	N	N	-	-	11.70	1.17	1.43	8.63	0.47	16.672	0.047	0.701	15.889	0.035
87.5	N	N	-	-	11.43	1.16	1.38	8.38	0.51	16.196	0.046	0.571	15.545	0.034
fV 50Hz	N	N	-	-	32.70	4.49	2.36	25.64	0.21	19.946	0.065	0.948	18.835	0.098
fV116Hz	N	N	-	-	21.51	1.10	1.00	18.50	0.91	8.604	0.065	0.322	8.195	0.022

7-1. POWER CIRCUIT

1) Receive a cross-hatch inverted signal of fH 85.0kHz.

2) Adjust the picture condition with the front controls.

- Maximize the contrast and the brightness.
- Adjust the vertical and horizontal picture size to full-scan.

7-1-1. AC INPUT VOLTAGE AUTOMATIC SELECTION CIRCUIT confirmation

1) Receive entire white raster signals of MODE4, fH 24.8kHz and fH 85.0kHz respectively when applying the AC voltage of 220±10V.

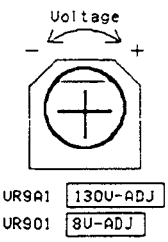
2) Confirm that the picture is normally displayed without screen noise, waver or strange sounds coming out of the monitor.

7-1-2. 130V-ADJ adjustment (PWB-MAIN)

1) Receive an entire white raster signal of fH 85.0kHz when applying the AC voltage of 110±10V.

2) Connect the DC voltmeter between TP130 (inner foot of R5M2) and GND (chassis).

3) Adjust the voltage to DC 130±0.4V with VR9A1 (130V-ADJ).



7-1-3. 8V-ADJ adjustment (PWB-POWER)

1) Receive an entire white raster signal of fH 85.0kHz when applying AC voltage of 110±10V.

2) Connect the DC voltmeter between TP8V (JP14) and GND (chassis).

3) Adjust the voltage to DC 8.6±0.1V with VR901 (8V-ADJ).

Note: The adjustment should be made while the LCD backlight is illuminating.

7-2. HIGH VOLTAGE CIRCUIT

7-2-1. ANODE VOLTAGE adjustment (PWB-MAIN)

> **WARNING !**
> VR5A1 (HV-ADJ) has been carefully factory-adjusted for each unit in order to satisfy regulations regarding X-radiation.
> Further adjustment on VR5A1 shall not be performed.
> In case of adjustment, the adjusted position of VR5A1 must be fixed by a soldering iron to prevent it from rotating.

1) Receive a cross-hatch inverted signal of MODE 5.

2) Turn OFF the POWER switch.

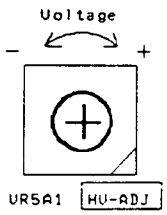
3) Connect a high-voltage probe between CRT anode and GND (chassis).

4) Turn ON the POWER switch.

5) Adjust the high-voltage to 25.0±0.1kV with VR5A1 (HV-ADJ).

6) Confirm the variation of high-voltage is within ±0.2kV when receiving fH 24.8kHz and fH 85.0kHz respectively.

7) Turn OFF the POWER switch and remove the high-voltage probe.



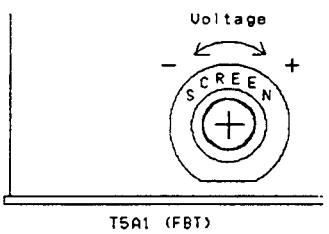
7-2-2. SCREEN VOLTAGE adjustment (PWB-MAIN)

1) Receive a cross-hatch inverted signal of MODE 5.

2) Turn ON the POWER switch.

3) Connect a high-voltage probe between TP-SC on the PWB-CRT and GND (chassis).

4) Adjust the screen voltage to 500±10V with SCREEN VR located lower of T5A1 (FBT).



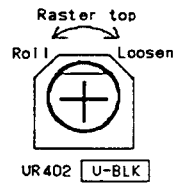
7-3. VERTICAL DEFLECTION CIRCUIT

7-3-1. V-HOLD confirmation

1) Receive cross-hatch inverted signals of fV 50Hz and 116Hz respectively.

2) Confirm that the picture is synchronized normally.

7-3-2. BLANKING adjustment (PWB-DEFL)

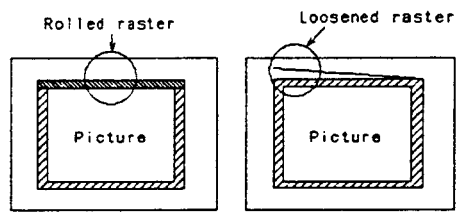


1) Receive a cross-hatch inverted signal of MODE 5.

2) Adjust the vertical size and position of the picture roughly with the front controls.

3) Maximize the brightness so that the back-raster appears on the screen.

4) Adjust VR402 (V-BLK) if the back-raster rolls or loosens at the top.

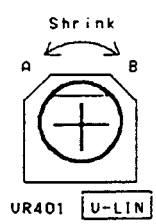


5) Receive a cross-hatch inverted signal of fV 116Hz.

6) Confirm that the picture is normally displayed and if not, repeat 4) until the picture is optimum.

7) Return the brightness to center indication.

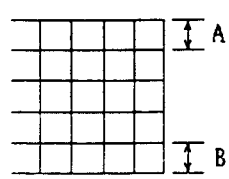
7-3-3. V-LIN adjustment (PWB-DEFL)



1) Receive a cross-hatch inverted signal of MODE 4.

2) Adjust the vertical size and position of the picture and make sure the vertical size is 225±5mm.

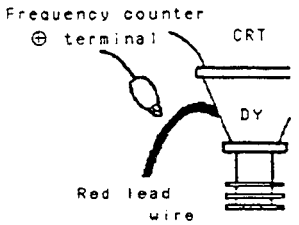
3) Adjust VR401 (V-LIN) so that difference between A and B of the right hand side figure is as follows: $|A - B| \leqq 0.5$mm



7-4. HORIZONTAL DEFLECTION CIRCUIT

7-4-1. H-HOLD adjustment (PWB-VIDEO)

WARNING !
The H-HOLD has been carefully factory-adjusted for each unit in order to satisfy regulations regarding X-radiation.
In case of the readjustment, you should replace IC803 and perform the following adjustment.



1) Receive a cross-hatch inverted signal of fH 85.5kHz.

2) Connect ⊕ terminal of a frequency counter to the red lead wire from DY, and the ⊖ terminal to GND (chassis).

3) Turn OFF the POWER switch.

4) Turn ON the POWER switch while pressing the MENU, + and - buttons at the same time.

5) Press the MENU button while HLD is blinking on the LCD display, and the picture drifts.

6) Adjust the horizontal oscillation frequency with the +/- buttons so that the frequency counter reads 84.5 - 86.5kHz.
The picture returns to normal in five seconds after the completion of the adjustment.

7) Press the MENU button again to store the above setting, and the picture returns to normal from drifting in five seconds.

Note: Neither the + nor the - button should be pressed at this time.

8) Receive fH 24.8kHz and 57.5kHz respectively and repeat the adjustment items 5) to 7).
The specified setting range for the other two signals are as follows:

fH 24.8kHz: 24.3 - 25.3kHz
fH 57.5kHz: 56.5 - 58.5kHz

9) When the adjustments for the above three points are completed, press the MENU button while SET is blinking. A completion message 'set to E2' appears on the LCD display.

WARNING: Once SET is selected, you will not be able to make any further adjustment on the H-HOLD unless replacing IC803.

7-4-2. FH-LIMITER confirmation

1) Receive a cross-hatch inverted signal of fH 24.8kHz.

2) Confirm that the picture disappears and an error message 'no signal' or 'too slow fH' is displayed on the LCD panel. Also, make sure the horizontal oscillation frequency is within the specified range: 55 - 70kHz

3) Receive fH 27.0kHz and confirm that the picture is synchronized.

4) Receive fH 87.5kHz and confirm that the picture disappears and an error message 'no signal' or 'too fast fH' is displayed on the LCD panel. Also, make sure the horizontal oscillation frequency is within the specified range above.

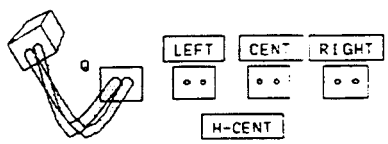
5) Receive fH 85.0kHz and confirm that the picture is synchronized.

6) Turn off the power of signal generator and confirm that an error message 'no signal' is displayed on the LCD panel and the horizontal frequency is within the specified range above.

7) Remove the frequency counter.

7-5. PICTURE SIZE, POSITION AND DISTORTION

7-5-1. H-CENT adjustment (PWB-DEFL)



1) Receive a cross-hatch inverted signal of fH 85.0kHz.

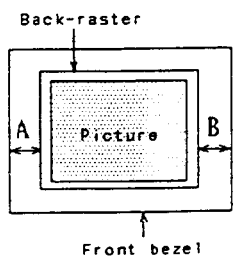
2) Adjust the horizontal size and position of the picture roughly with the front controls.

3) Maximize the brightness so that the back-raster appears on the screen.

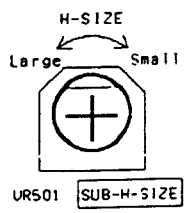
4) Confirm that the back-raster moves by changing the connection between CONNECTOR Q (H-CENT) and RIGHT, CENT and LEFT respectively.

5) Connect the CONNECTOR Q (H-CENT) with one of the three connectors above so that A and B in the right-hand side figure are almost equal.

6) Return the brightness to center indication.



7-5-2. H-SIZE LIMIT adjustment (PWB-DEFL)

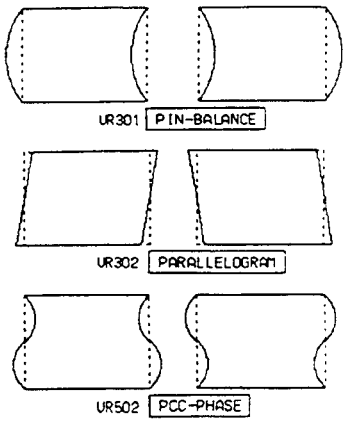


1) Receive a cross-hatch inverted signal of fH 85.0kHz.

2) Select HSC and maximize the horizontal picture size by the + button.

3) Adjust VR501 (SUB-H-SIZE) to make the horizontal size full-scan.

7-5-3. DISTORTION adjustment (PWB-DEFL)



1) Receive a cross-hatch inverted signal of MODE 1.

2) Adjust the picture size, position and distortion roughly with the front controls.

3) Correct the side distortion to produce straight edges with the following volumes.

VR301 (PIN-BALANCE) ——— Adjust with PCC
VR302 (PARALLELOGRAM) ----- Adjust with TRA
VR502 (PCC-PHASE)

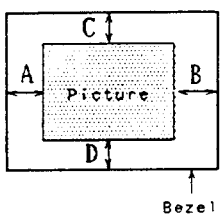
7-5-4. PICTURE SIZE, POSITION AND DISTORTION adjustment

1) Receive a cross-hatch inverted signal of all preset modes respectively.

2) Turn OFF the POWER switch.

3) Turn ON the POWER switch while pressing the MENU, + and - buttons at the same time.

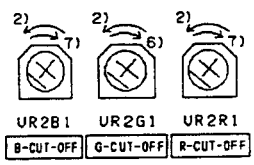
4) Adjust the picture size and position to the specified setting below and correct the distortion with the front controls.



H-SIZE: 300±2mm H-POSITION: |A - B| < 2mm
V-SIZE: 225±2mm V-POSITION: |C - D| < 2mm

7-6. VIDEO CIRCUIT

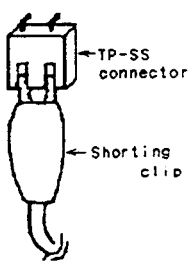
7-6-1. CUT-OFF adjustment (PWB-VIDEO)



1) Receive an entire white raster signal of MODE 4.

2) Turn VR2R1, VR2G1 and VR2B1 (R,G,B-CUT-OFF) fully counterclockwise.

3) Make sure VR201 (SUB-CONT) and VR202 (SUB-BRT) are at the mechanical center.

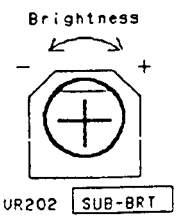


4) Short-circuit between pin ① and ② of TP-SS on the PWB-DEFL.

5) Confirm that the screen is totally black.

6) Turn the VR2G1 clockwise until a green horizontal line is barely visible on the screen.

7) Adjust the VR2R1 and VR2B1 so as to make the green line white.



8) Remove the short-circuit.

9) Receive a 16-gradation gray scale signal.

10) Adjust the VR202 so that the 15th gradation on the gray scale is barely visible when the 16th gradation (back raster) is not visible at all.

7-6-2. COLOR TEMPERATURE adjustment

1) Receive an entire white raster signal of MODE 4.

2) Turn OFF the POWER switch.

3) Turn ON the POWER switch while pressing the MENU, + and - buttons at the same time.

4) Keep pressing the MENU button while RED/BLU is blinking so that '9300K' appears on the LCD display.

5) Apply a color analyzer probe to the center of the screen.

6) Select BLU and adjust the color temperature with the +/- buttons so that the Y reading of the color analyzer is 0.297±0.005.

7) Select RED and adjsut it with the +/- buttons so that the X reading is 0.283±0.005.

8) Maximize the brightness.

9) Keep pressing the MENU button while RED/BLU is blinking.

10) Make sure '6500K' that is next value of color temperature adjusted appears on the LCD display and the brightness returns to center indication.

11) Repeat 4) to 10) for 6500K and 5000K. The respective X and Y readings are as follows:

6500K	X: 0.313±0.005	Y: 0.329±0.005
5000K	X: 0.345±0.005	Y: 0.352±0.005

7-6-3. BRIGHTNESS adjustment (PWB-VIDEO)

1) Receive a white window (approx. 80×80mm square) signal of MODE 4.

2) Apply a luminance meter to the window pattern on the screen center.

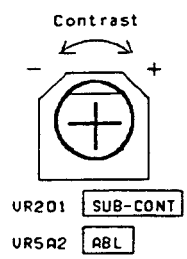
3) Adjust VR201 (SUB-CONT) so that the luminance meter reads 140±5 nits.

4) Receive an entire white raster signal.

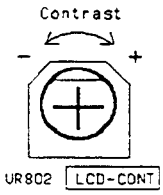
5) Apply the luminance meter to the screen center.

6) Adjust VR5A2 (ABL) on the PWB-MAIN so that luminance meter reads 95+5/-10 nits.

80×80mm white window pattern



7-7. LCD-CONT adjustment [PWB-VIDEO]



1) Adjust VR802 (LCD-CONT) so that only the text appears on the LCD display with the back light on.

7-8. POWER MANAGEMENT confirmation

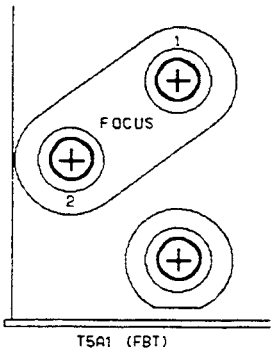
1) Turn OFF the POWER switch and connect a digital wattage meter.
2) Turn ON the POWER switch.
3) Receive a cross-hatch signal of fH 85.0kHz.
4) Set the DPM timer to 5min.
5) Disconnect the H/HV cable.
6) Confirm that the input wattage is 12.5±1.0W and the LCD displays 'STAND-BY'.
7) Connect the H/HV cable and confirm that the picture appears within 3 seconds.
8) Disconnect the V cable.
9) Confirm that the input wattage is 5.2±1.0W and the LCD displays 'SUSPEND'.
10) Connect the V cable and confirm that the picture appears within 15 seconds.
11) Set the DPM to OFF (--).
12) Turn OFF the POWER switch and remove the digital wattage meter.
13) Turn ON the POWER switch.

7-9. FOCUS (PWB-MAIN)

1) Receive a green cross-hatch signal of fH 56.5kHz.

2) Adjust FOCUS-1 VR of T5A1 (FBT) to make the vertical center line sharpest.

3) Adjust FOCUS-2 VR of the T5A1 to make the horizontal edge lines sharpest at points T and B as shown in the right figure.



4) If the focus at points T and M is as shown in Fig.1, adjust VR404 (V-DBF) on the PWB-DEFL to make the horizontal lines at points T, M and B have the same thickness. And adjust the FOCUS-2 VR again to make the horizontal lines at points T, M and B sharpest. (The VR404 should not be adjusted when focus at points T and M is optimum.)

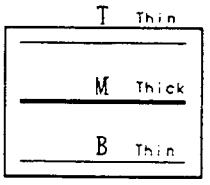
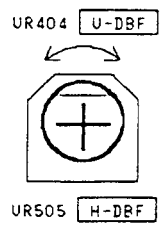


Fig.1

5) If the focus at points L and M is as shown in Fig.2 or vice versa, adjust VR505 (H-DBF) on the PWB-DEFL to make the horizontal center line have the same thickness at points L, M and R. And adjust the FOCUS-2 VR again to make the horizontal center line sharpest. (The VR505 should not be adjusted when focus at points L and M is optimum.)



6) Repeat 2) to 5) until the focus is optimum.

7) Confirm no focus variation on the entire screen.

8) Check the focus with red and blue respectively.

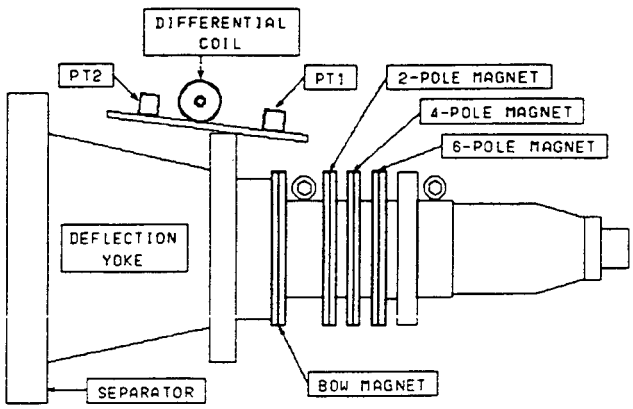
Fig.2

7-10. ITC (Integrated Tube Component) ADJUSTMENTS

The following ITC adjustments should be made only when a new picture tube is installed, or convergence is poor.

All set-up adjustments above-mentioned must be completed before any further ITC adjustments is attempted.

Note: See Chapter 10·concerning parts list for the ITC adjustments.



<Adjustment Volume Location>

7-10-1. STATIC CONVERGENCE adjustment

1) Receive a red and blue cross-hatch signal.

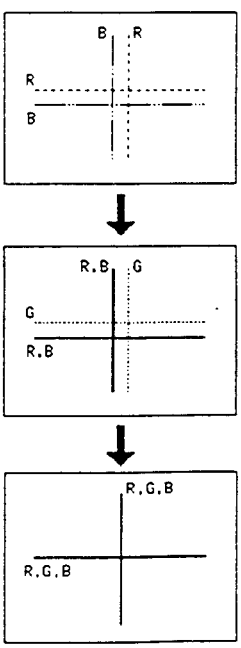
2) Adjust the 4-POLE MAGNET so that red and blue beams converge on the center cross lines.

3) Add green to the red and blue cross-hatch signal.

4) Adjust the 6-POLE MAGNET so that red and blue beams converge with green beam on the center cross lines.

5) Repeat the adjustment until red, blue and green beams converge each other.

6) Fix the 4-POLE MAGNET and the 6-POLE MAGNET with paint lock.

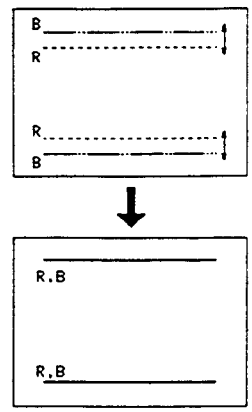


7-10-2. YV adjustment

1) Receive a red and blue cross-hatch signal.

2) Adjust PT2 so that red and blue beams converge each other at upper and lower edges of the horizontal lines.

3) Fix the PT2 with paint lock.

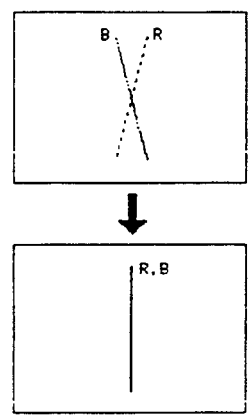


7-10-3. YH adjustment

1) Receive a red and blue cross-hatch signal.

2) Adjust PT1 so that vertical cross lines converge each.

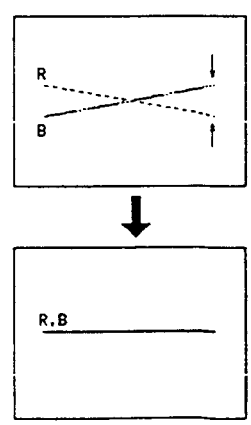
3) Fix the PT1 with paint lock.



7-10-4. DIFFERENTIAL COIL adjustment (XV adjustment)

1) Receive a red and blue cross-hatch signal.

2) Adjust the DIFFERENTIAL COIL so that the horizontal cross lines converge each other.



7-10-5. BOW MAGNET adjustment

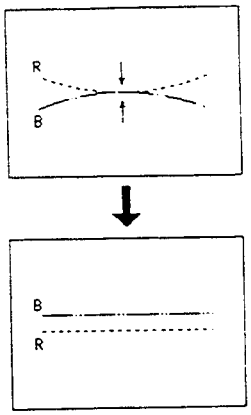
1) Receive a red and blue cross-hatch signal.

2) Adjust the BOW MAGNET so as to straighten an arched horizontal line.

   Note: Must be careful not to misconverge vertical lines by this adjustment.

3) Perform the STATIC CONVERGENCE adjustment so as to converge the red and blue lines.

4) Fix the BOW MAGNET with paint lock.



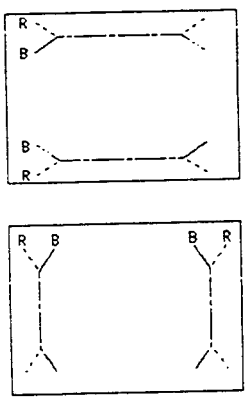
7-10-6. SCREEN-CORNER MISCONVERGENCE correction

1) Receive a red and blue cross-hatch signal.

2) Affix a yellow or white magnet corresponding to the partially misconverged areas on the side of SEPARATOR.

   Note: Must be careful not to affect distortion by this correction.

3) Fix the magnet with bond.



8. BEFORE TROUBLESHOOTING

This monitor has been designed to sync automatically horizontal frequencies from 27.0 to 86.0kHz and vertical frequencies between 50 and 120Hz. Depending on the input signal, the picture may not appear normally. The monitor is not defective if the picture appears on the center of the screen by receiving the preset timing.

Find the problem with the monitor among the numbered items below and confirm the check points.

< Problem >	< Check Point >
1. No indication appears on the LCD display.	Is the AC power cord securely connected ?
	Is the proper AC voltage supplied to the power cord ?
2. No picture displayed	Is the monitor at the POWER MANAGEMENT state ?
	Is the signal cable securely connected ? (Make sure nothing wrong with the signal cable.)
	Is the power of the computer on ? (The computer should be working normally.)
	Is the signal input connector correctly selected by SIGNAL SELECT ?
	Adjust CONTRAST and BRIGHTNESS. (They should not be on minimum.)
3. Poor or distorted color	There must not be any magnetic source such as a transformer or a motor near the monitor.
	Is this corrected by DEGAUSS ?
	Is the signal cable securely connected ? (Make sure nothing wrong with the signal cable.)
4. Picture unsynchronized	Is the signal cable securely connected ? (Make sure nothing wrong with the signal cable.)
	Is the signal timing of the computer within the specifications of the monitor ?

5. The screen size is small or large.
   - Adjust H-SIZE and V-SIZE.
   - Is the signal timing of the computer within the specifications of the monitor ?

6. The position of the picture is not in the center of the screen.
   - Adjust H-POSITION and V-POSITION.
   - Is the signal timing of the computer within the specifications of the monitor ?

7. The picture displayed is too bright or too dark.
   - Adjust CONTRAST and BRIGHTNESS. (They should not be on maximum or minimum.)

8. The screen is distorted at both sides.
   - Adjust PINCUSHION or TRAPEZOID.

9. The screen is rotated.
   - Adjust RASTER ROTATION.

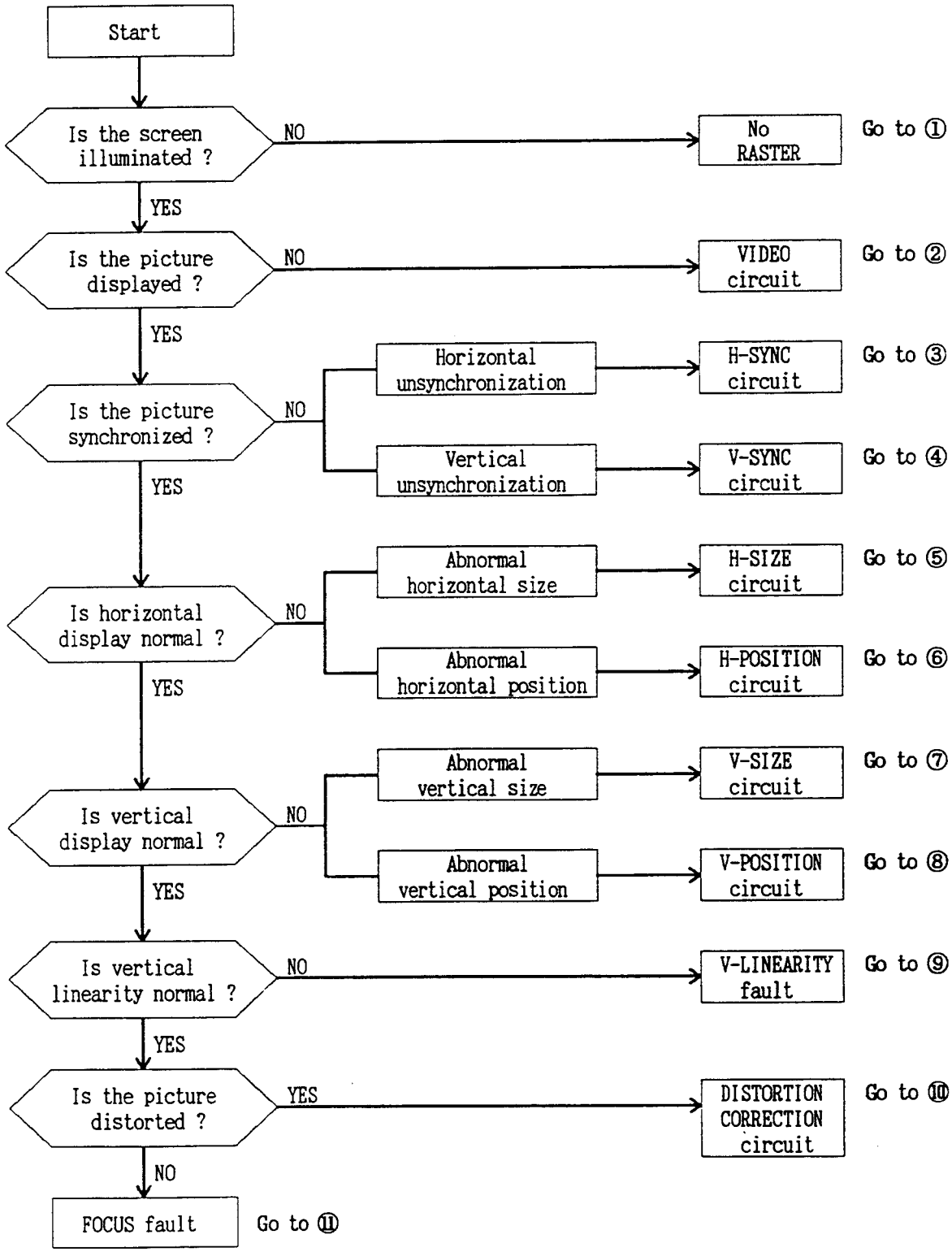
10. The screen is shaking.
    - There must not be any magnetic source such as a transformer or a motor near the monitor.
    - Is the supplied AC voltage normal ?

If you are unable to correct the fault by using the chart above, proceed to Chapter 9 TROUBLESHOOTING FLOWCHARTS on the following pages. Before that, the following controls must be set as follows:

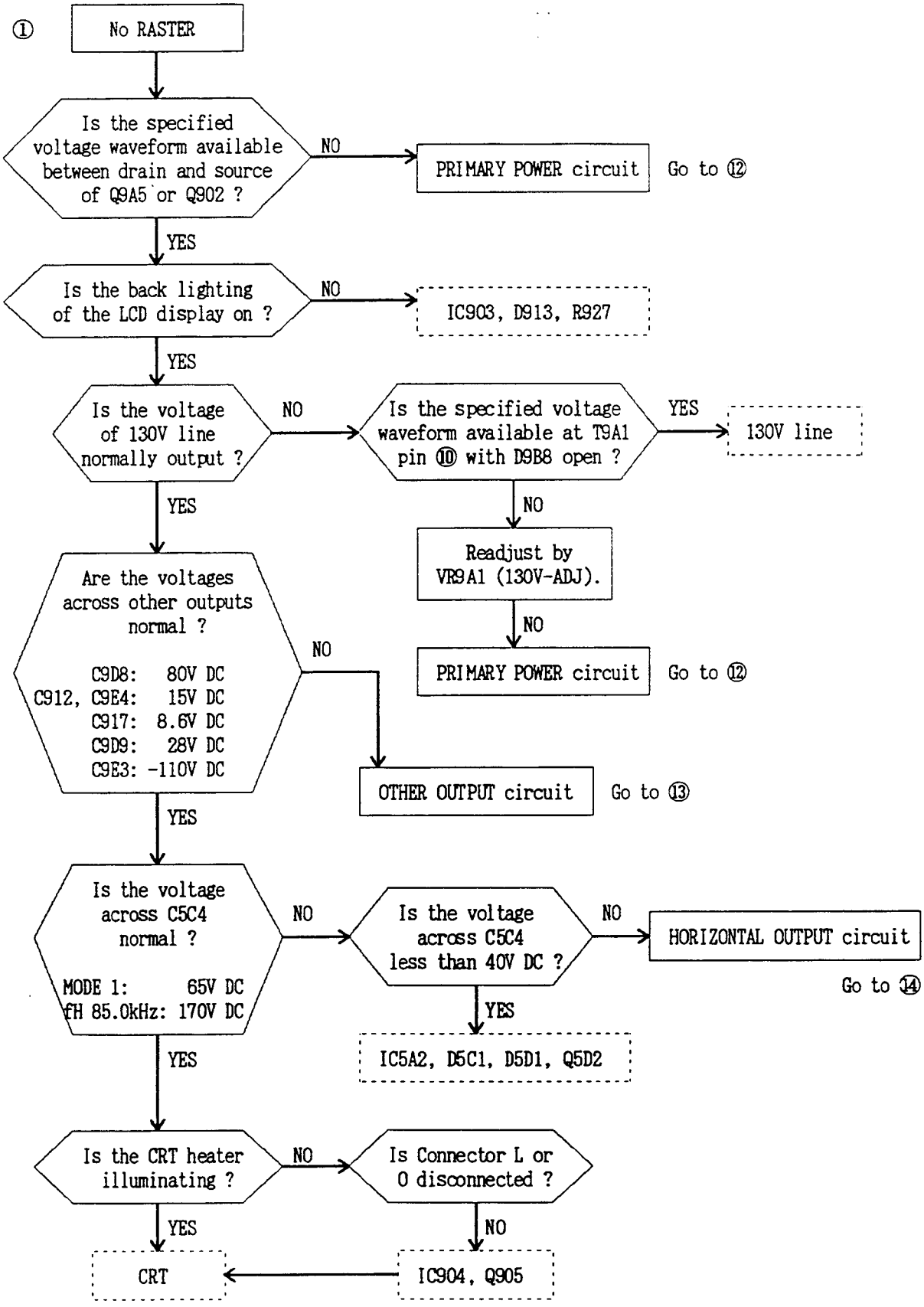
Control	Setting
CONTRAST:	Max (0.74V)
BRIGHTNESS:	Center (CENT)
RASTER ROTATION:	Center (CENT)
DISPLAY POWER MANAGEMENT:	Off (--)

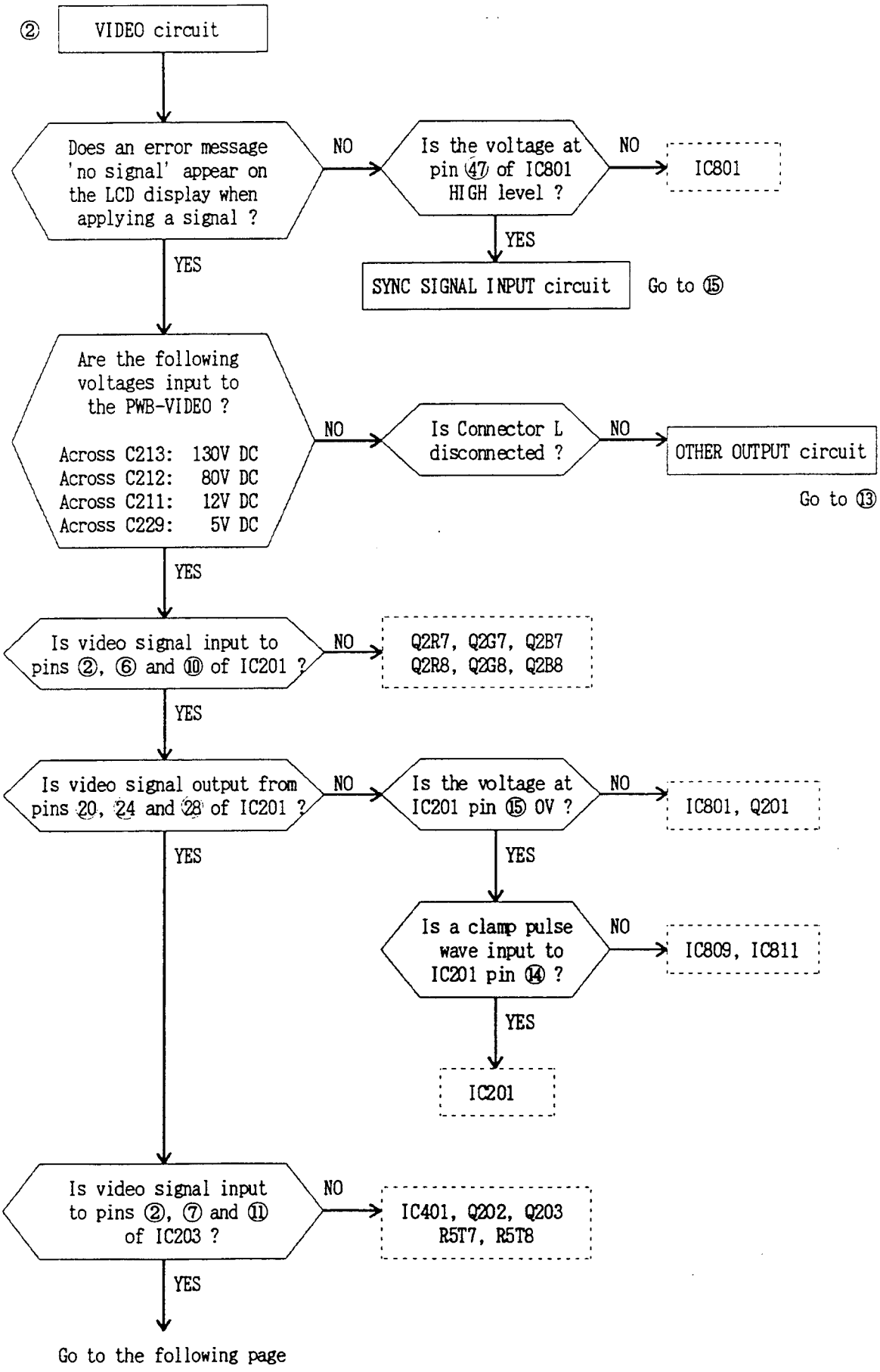
9. TROUBLESHOOTING FLOWCHARTS

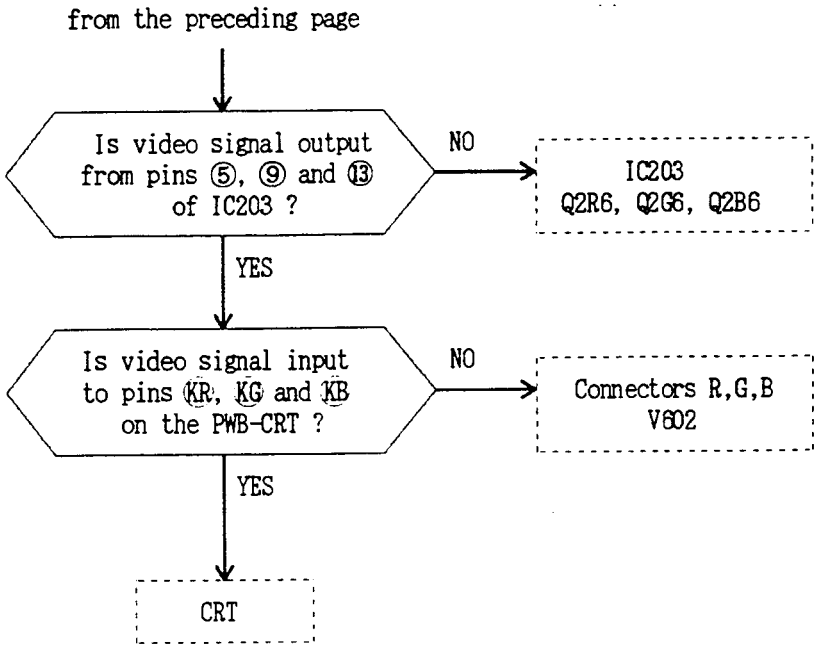
< Diagnosis Flowchart >

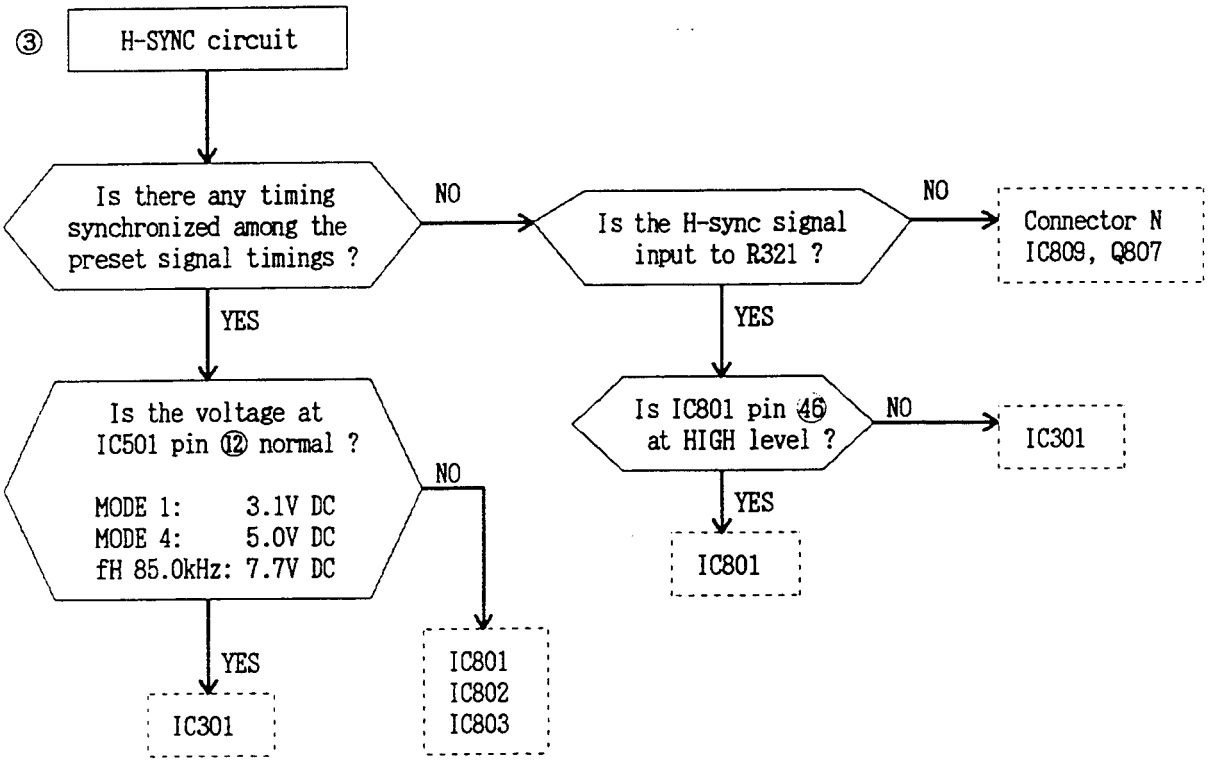


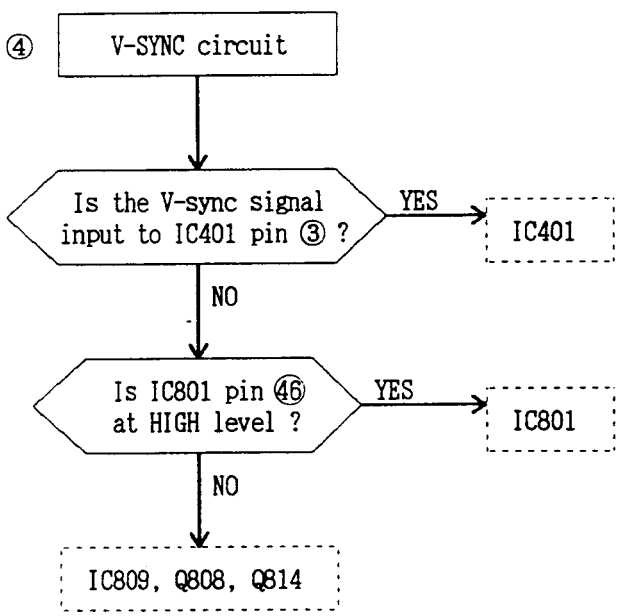
Note: Check following the diagnosis flowchart, then refer to the appropriate flowchart to determine the faulty circuit or part and replace it with part number specified as required.

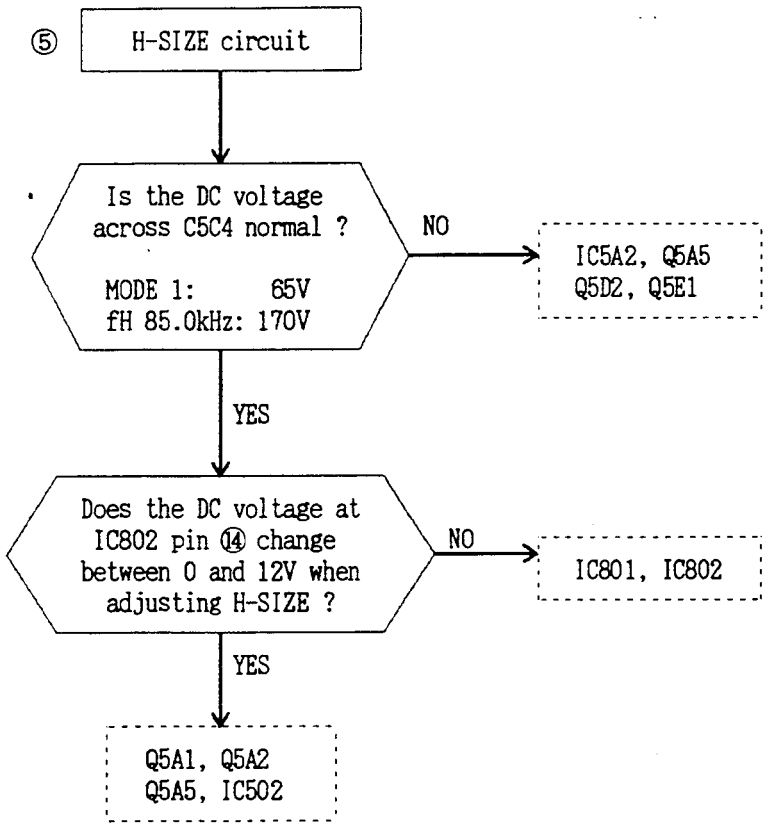

①
No RASTER
Is the specified voltage waveform available between drain and source of Q9A5 or Q902 ?
NO
PRIMARY POWER circuit
Go to ⑫
YES
Is the back lighting of the LCD display on ?
NO
IC903, D913, R927
YES
Is the voltage of 130V line normally output ?
NO
Is the specified voltage waveform available at T9A1 pin ⑩ with D9B8 open ?
YES
130V line
YES
NO
Readjust by VR9A1 (130V-ADJ).
NO
PRIMARY POWER circuit
Go to ⑫
Are the voltages across other outputs normal ?
C9D8: 80V DC
C912, C9E4: 15V DC
C917: 8.6V DC
C9D9: 28V DC
C9E3: -110V DC
NO
OTHER OUTPUT circuit
Go to ⑬
YES
Is the voltage across C5C4 normal ?
MODE 1: 65V DC
fH 85.0kHz: 170V DC
NO
Is the voltage across C5C4 less than 40V DC ?
NO
HORIZONTAL OUTPUT circuit
Go to ⑭
YES
IC5A2, D5C1, D5D1, Q5D2
YES
Is the CRT heater illuminating ?
NO
Is Connector L or O disconnected ?
YES
NO
CRT
IC904, Q905

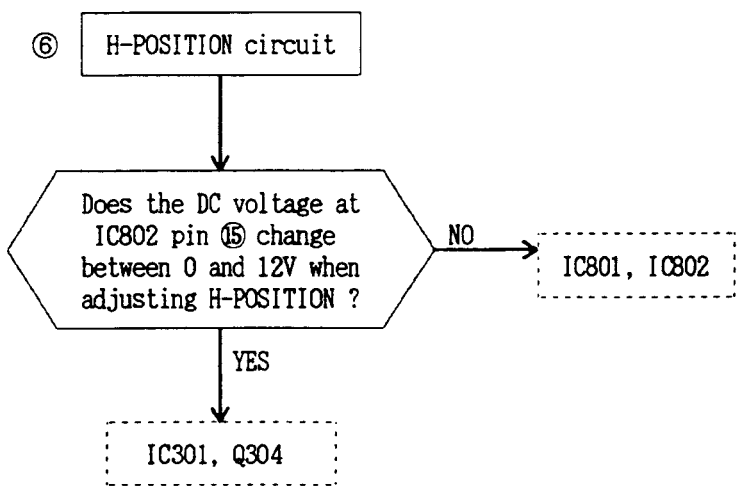

②
VIDEO circuit
Does an error message 'no signal' appear on the LCD display when applying a signal ?
NO
Is the voltage at pin ㊼ of IC801 HIGH level ?
NO
IC801
YES
SYNC SIGNAL INPUT circuit
Go to ⑮
YES
Are the following voltages input to the PWB-VIDEO ?
Across C213: 130V DC
Across C212: 80V DC
Across C211: 12V DC
Across C229: 5V DC
NO
Is Connector L disconnected ?
NO
OTHER OUTPUT circuit
Go to ⑬
YES
Is video signal input to pins ②, ⑥ and ⑩ of IC201 ?
NO
Q2R7, Q2G7, Q2B7
Q2R8, Q2G8, Q2B8
YES
Is video signal output from pins 20, 24 and 28 of IC201 ?
NO
Is the voltage at IC201 pin ⑮ 0V ?
NO
IC801, Q201
YES
YES
Is a clamp pulse wave input to IC201 pin ⑭ ?
NO
IC809, IC811
YES
IC201
Is video signal input to pins ②, ⑦ and ⑪ of IC203 ?
NO
IC401, Q202, Q203
R5T7, R5T8
YES
Go to the following page

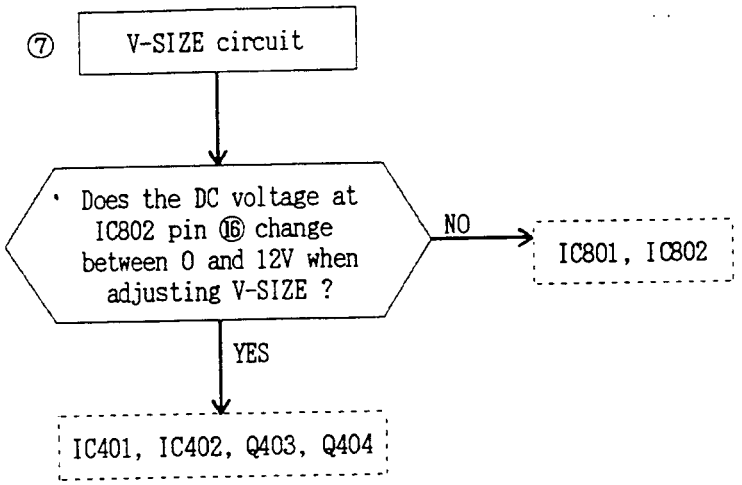

from the preceding page
Is video signal output from pins ⑤, ⑨ and ⑬ of IC203 ?
NO
IC203 Q2R6, Q2G6, Q2B6
YES
Is video signal input to pins KR, KG and KB on the PWB-CRT ?
NO
Connectors R,G,B V602
YES
CRT

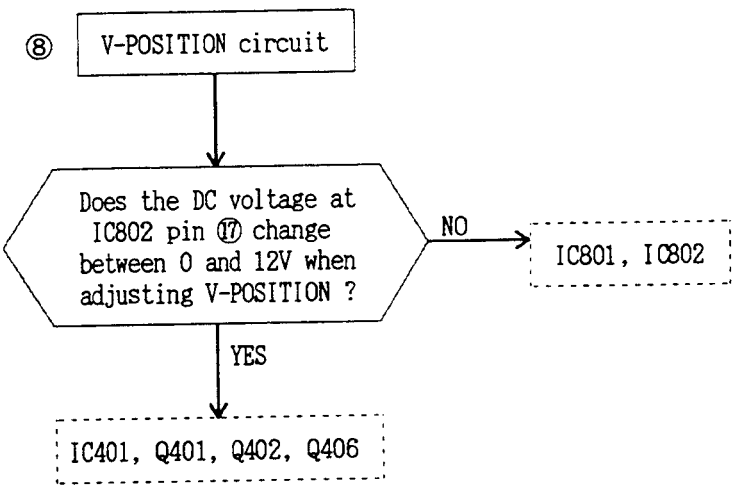

③
H-SYNC circuit
Is there any timing synchronized among the preset signal timings ?
NO
Is the H-sync signal input to R321 ?
NO
Connector N
IC809, Q807
YES
YES
Is the voltage at IC501 pin ⑫ normal ?
MODE 1: 3.1V DC
MODE 4: 5.0V DC
fH 85.0kHz: 7.7V DC
NO
Is IC801 pin ㊻ at HIGH level ?
NO
IC301
YES
IC801
YES
IC301
IC801
IC802
IC803

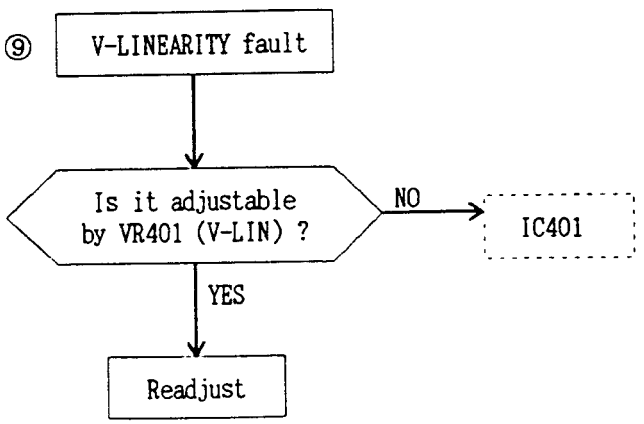

④
V-SYNC circuit
Is the V-sync signal input to IC401 pin ③ ?
YES
IC401
NO
Is IC801 pin ㊻ at HIGH level ?
YES
IC801
NO
IC809, Q808, Q814

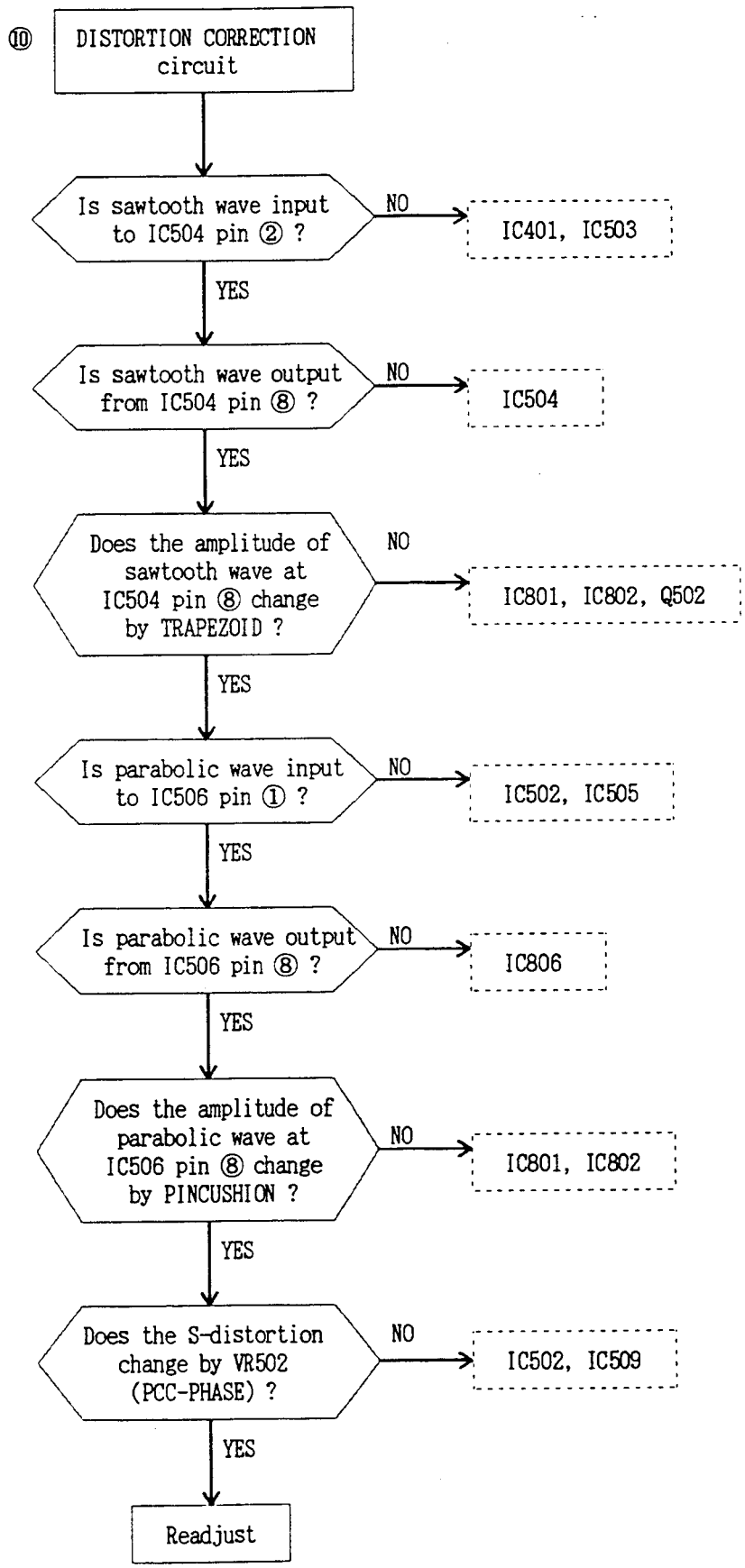

⑤
H-SIZE circuit
Is the DC voltage across C5C4 normal ?
MODE 1: 65V
fH 85.0kHz: 170V
NO
IC5A2, Q5A5
Q5D2, Q5E1
YES
Does the DC voltage at IC802 pin ⑭ change between 0 and 12V when adjusting H-SIZE ?
NO
IC801, IC802
YES
Q5A1, Q5A2
Q5A5, IC502

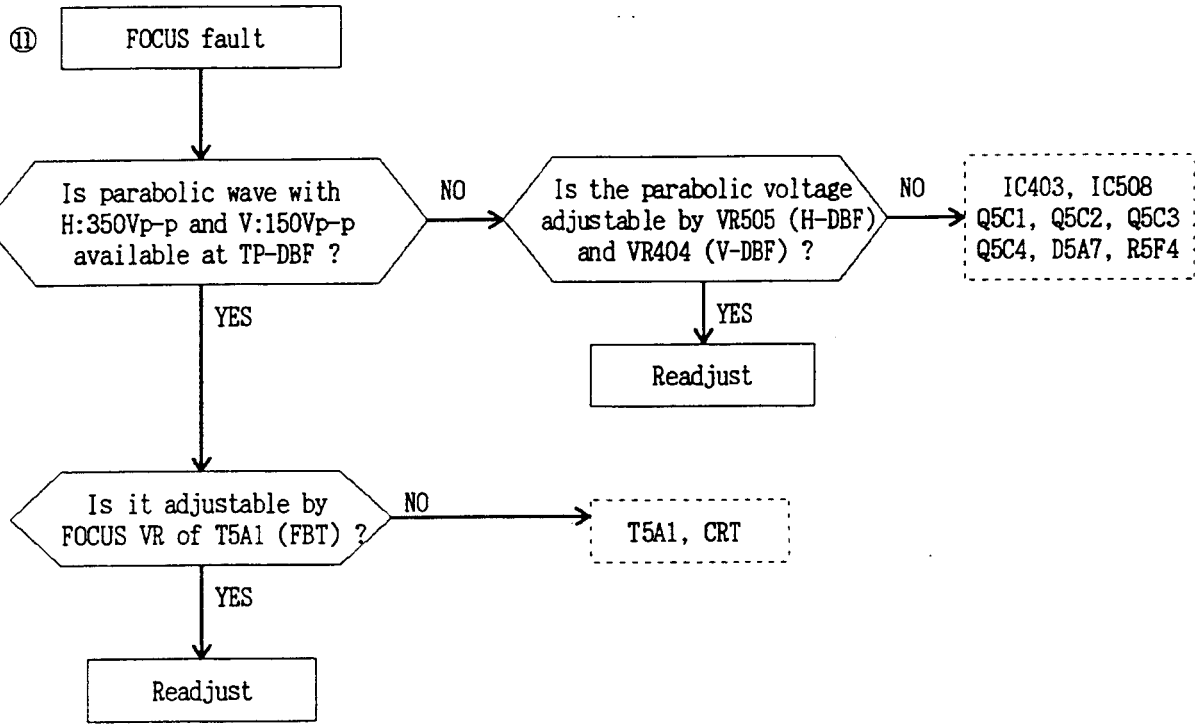

⑥
H-POSITION circuit
Does the DC voltage at IC802 pin ⑮ change between 0 and 12V when adjusting H-POSITION ?
NO
IC801, IC802
YES
IC301, Q304

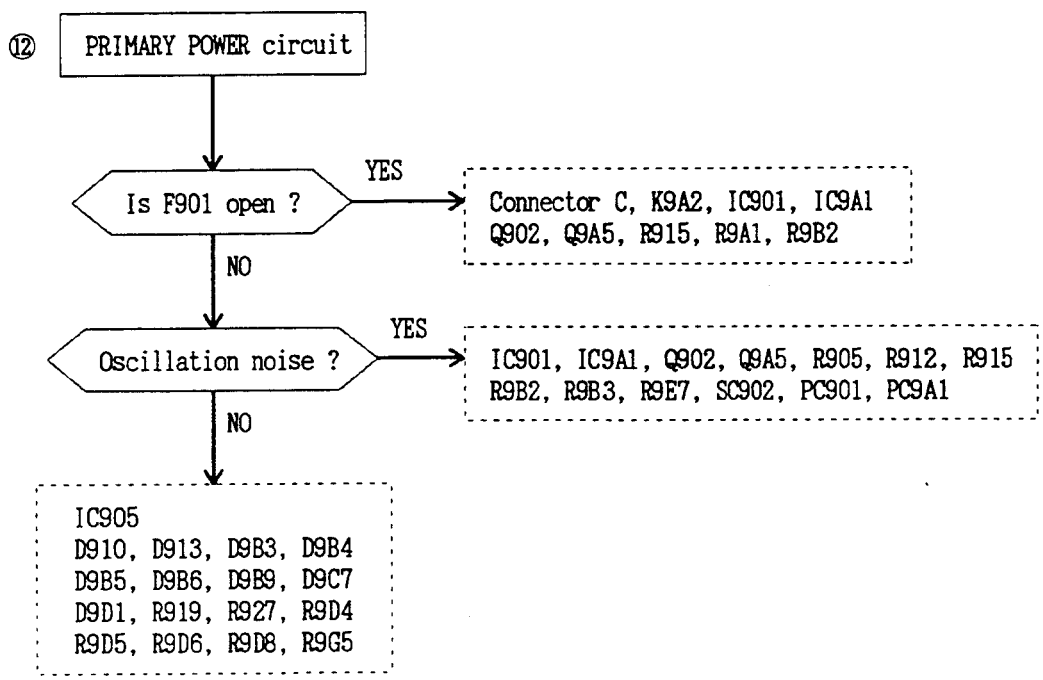

⑦
V-SIZE circuit
Does the DC voltage at IC802 pin ⑯ change between 0 and 12V when adjusting V-SIZE ?
NO
IC801, IC802
YES
IC401, IC402, Q403, Q404

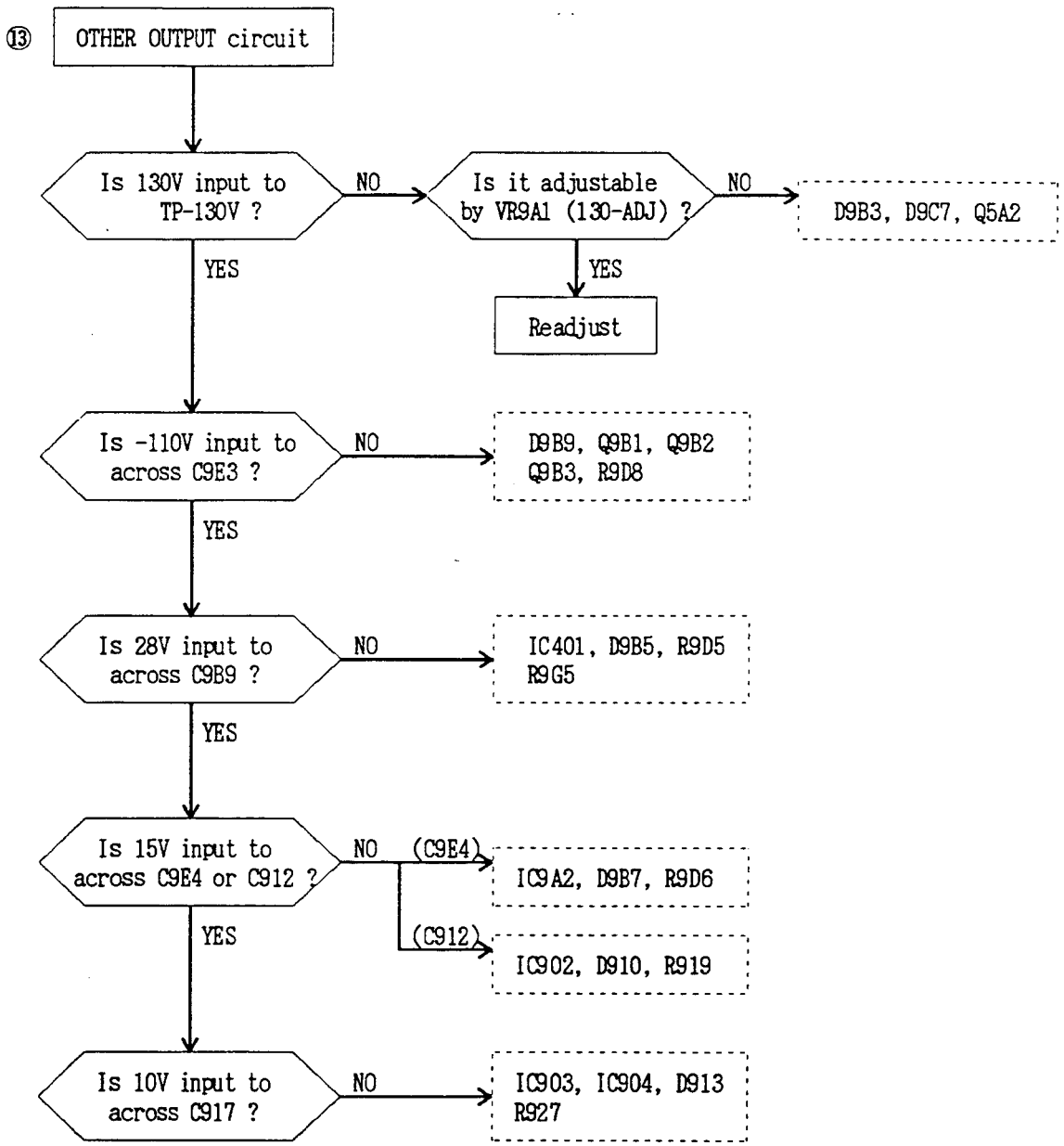

⑧
V-POSITION circuit
Does the DC voltage at IC802 pin ⑰ change between 0 and 12V when adjusting V-POSITION ?
NO
IC801, IC802
YES
IC401, Q401, Q402, Q406

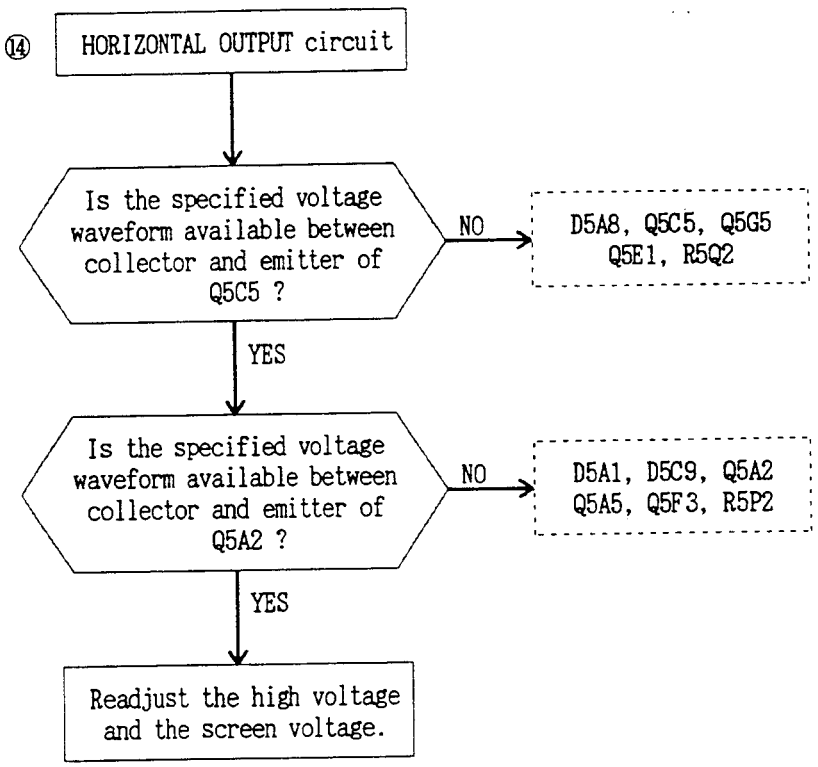

⑨
V-LINEARITY fault
Is it adjustable by VR401 (V-LIN) ?
NO
IC401
YES
Readjust

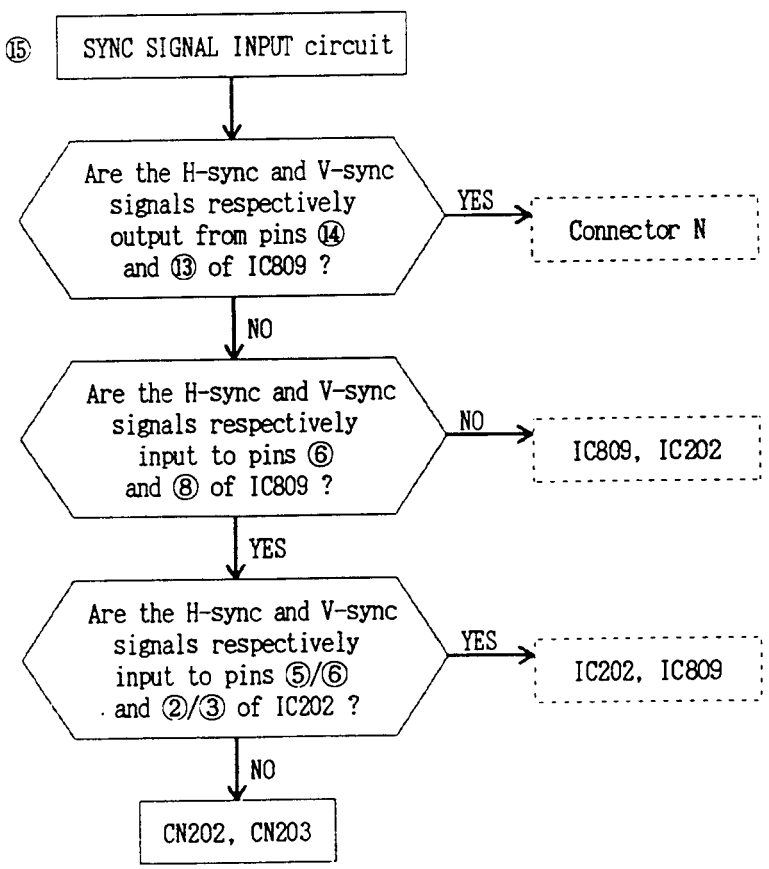

⑩ DISTORTION CORRECTION circuit
Is sawtooth wave input to IC504 pin ② ?
NO
IC401, IC503
YES
Is sawtooth wave output from IC504 pin ⑧ ?
NO
IC504
YES
Does the amplitude of sawtooth wave at IC504 pin ⑧ change by TRAPEZOID ?
NO
IC801, IC802, Q502
YES
Is parabolic wave input to IC506 pin ① ?
NO
IC502, IC505
YES
Is parabolic wave output from IC506 pin ⑧ ?
NO
IC806
YES
Does the amplitude of parabolic wave at IC506 pin ⑧ change by PINCUSHION ?
NO
IC801, IC802
YES
Does the S-distortion change by VR502 (PCC-PHASE) ?
NO
IC502, IC509
YES
Readjust


⑪
FOCUS fault
Is parabolic wave with H:350Vp-p and V:150Vp-p available at TP-DBF ?
NO
Is the parabolic voltage adjustable by VR505 (H-DBF) and VR404 (V-DBF) ?
NO
IC403, IC508 Q5C1, Q5C2, Q5C3 Q5C4, D5A7, R5F4
YES
YES
Readjust
Is it adjustable by FOCUS VR of T5A1 (FBT) ?
NO
T5A1, CRT
YES
Readjust


⑫
PRIMARY POWER circuit
Is F901 open ?
YES
Connector C, K9A2, IC901, IC9A1 Q902, Q9A5, R915, R9A1, R9B2
NO
Oscillation noise ?
YES
IC901, IC9A1, Q902, Q9A5, R905, R912, R915 R9B2, R9B3, R9E7, SC902, PC901, PC9A1
NO
IC905
D910, D913, D9B3, D9B4
D9B5, D9B6, D9B9, D9C7
D9D1, R919, R927, R9D4
R9D5, R9D6, R9D8, R9G5


⑬ OTHER OUTPUT circuit
Is 130V input to TP-130V ?
NO
Is it adjustable by VR9A1 (130-ADJ) ?
NO
D9B3, D9C7, Q5A2
YES
YES
Readjust
Is -110V input to across C9E3 ?
NO
D9B9, Q9B1, Q9B2 Q9B3, R9D8
YES
Is 28V input to across C9B9 ?
NO
IC401, D9B5, R9D5 R9G5
YES
Is 15V input to across C9E4 or C912 ?
NO
(C9E4)
IC9A2, D9B7, R9D6
(C912)
IC902, D910, R919
YES
Is 10V input to across C917 ?
NO
IC903, IC904, D913 R927


⑭
HORIZONTAL OUTPUT circuit
Is the specified voltage waveform available between collector and emitter of Q5C5 ?
NO
D5A8, Q5C5, Q5G5 Q5E1, R5Q2
YES
Is the specified voltage waveform available between collector and emitter of Q5A2 ?
NO
D5A1, D5C9, Q5A2 Q5A5, Q5F3, R5P2
YES
Readjust the high voltage and the screen voltage.


⑮
SYNC SIGNAL INPUT circuit
Are the H-sync and V-sync signals respectively output from pins ⑭ and ⑬ of IC809 ?
YES
Connector N
NO
Are the H-sync and V-sync signals respectively input to pins ⑥ and ⑧ of IC809 ?
NO
IC809, IC202
YES
Are the H-sync and V-sync signals respectively input to pins ⑤/⑥ and ②/③ of IC202 ?
YES
IC202, IC809
NO
CN202, CN203

10. SERVICE PARTS LIST

WARNING !

The components identified by ⚠ in this manual are critical for safety.
Replace only with part number specified.

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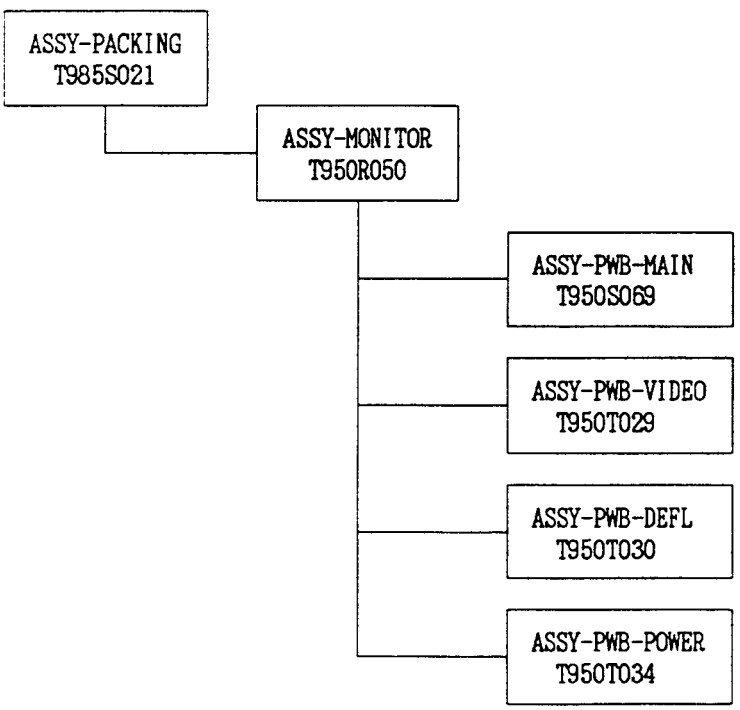
**** Family Tree ****



ELECTRICAL PARTS LIST

***** Abbreviations in PART section *****

Abbreviation	Meaning
R-C	Resistor-Carbon
R-MB	Resistor-Metal
R-CE	Resistor-Cement
R-COMP	Resistor-Composition
R-FUSE	Resistor-Fuse
C-C	Capacitor-Ceramic
C-E	Capacitor-Electrolytic
C-PP	Capacitor-Polypropylene
C-TF	Capacitor-Stacked Metallized Plastic Film
COIL	Choke Coil
D	Diode
ZD	Zener Diode
TR	Transistor
PHC	Photo Coupler
PTH	Positive Thermistor
HDT	Horizontal Drive Transformer
FBT	Flyback Transformer
TRANS	Transformer
VR	Variable Resistor
SW	Switch

***** Marks in DESCRIPTION section *****

〈Resistor〉

Mark	Tolerance
F	±1 %
G	±2 %
J	±5 %
K	±10 %

〈Capacitor〉

Mark	Tolerance
H	±3 %
J	±5 %
K	±10 %
M	±20 %
P	+100 % −0 %
Z	+80 % −20 %

ELECTRICAL PARTS LIST

DWG. TITLE : ASSY-PWB-MAIN
DWG. NO. : T950S069

REF. NO	PART	DESCRIPTION		PART NO	PRICE(YEN)	REMARK
C5A1	C-PP	1800V	4700p-J	172Z988A40		
C5A2	C-PP	1250V	R075 μ-J	172Z050A40		
C5A3	C-PP	250V	2R2 μ-K	173Z845A41		
C5A5	C-C	2KV	R-470P-K	155Z263A31		
C5A7	C-PP	200V	R56 μ-J	172Z283A40		
C5A8	C-PP	400V	R56 μ-J	172Z333A40		
C5A9	C-PP	400V	R18 μ-J	172Z327A40		
C5B1	C-PP	400V	R15 μ-J	172Z326A40		
C5B2	C-PP	400V	R12 μ-J	172Z405A40		
C5B3	C-PP	400V	R12 μ-J	172Z405A40		
C5B6	C-PP	250V	1 μ-K	173Z842A43		
C5B8	C-TF	50V	R22 μ-J	171Z027A10		
C5B9	C-E NP	25V	10 μ-M	182Z098F10		
C5C1	C-TF	50V	R056 μ-J	171Z020A10		
C5C2	C-C	50V	R01 μ-Z	142P433A2		
C5C4	C-E	250V	330 μ-M	186Z457M02		
C5C6	C-PP	1250V	R01 μ-J	173Z862A50		
C5C7	C-E	450V	4R7 μ-M	180Z627D10		
C5C8	C-E	35V	100 μ-M	180Z242D10		
C5C9	C-E	50V	10 μ-M	180Z288D10		
C5D1	C-E	35V	100 μ-M	180Z242D10		
C5D2	C-C	50V	B-470P-K	142P368A2		
C5D3	C-PP	1800V	1800p-H	172Z983A44		
C5D4	SO-COPPER-WIRE			990P003A1		
C5D6	C-E	100V	1 μ-M	180Z364D10		
C5D7	C-E NP	25V	10 μ-M	182Z098F10		
C5D8	C-E	50V	R1 μ-M	180Z280D10		
C5E1	C-PP	200V	R1 μ-J	172Z274A40		
C5E2	C-E	35V	100 μ-M	180Z242D10		
C5E3	C-E	35V	100 μ-M	180Z242D10		
C5E4	C-TF	100V	4700p-J	171Z170A10		
C5E5	C-TF	50V	560p-J	171Z059A10		⚠
C5E6	C-TF	50V	6800p-J	171Z072A10		
C5E7	C-TF	50V	1800p-J	171Z065A10		
C5E8	C-TF	50V	2200p-J	171Z066A10		
C5E9	C-TF	50V	R01 μ-J	171Z074A10		
C5F1	C-E	35V	100 μ-M	180Z242D10		
C5F2	C-PP	630V	R047 μ-K	172Z650A41		
C5F3	C-PP	250V	4R7 μ-K	173Z847A43		
C5F4	C-C	50V	R01 μ-Z	142P433A2		
C5F7	C-E	50V	1 μ-M	180Z284D10		
C5G1	C-E	6R3V	3300 μ-M	180Z060D10		
C5G2	C-C	50V	B-4700p-K	142P380A2		
C5G3	C-E	50V	10 μ-M	180Z288D10		
C5G4	C-C	500V	B-680p-K	141Z354A21		
C5G5	C-C	50V	B-4700p-K	142P380A2		
C5G6	C-E	50V	10 μ-M	180Z288D10		
C5G7	C-C	500V	B-680p-K	141Z354A21		
C5H6	C-E	16V	330 μ-M	180Z154D10		
C5H7	C-PP	200V	R047 μ-J	172Z270A40		
C5H8	C-PP	200V	R1 μ-J	172Z274A40		⚠
C9A1	C-C		3300p-M	155Z484A31		
C9A2	C-C		3300p-M	155Z484A31		
C9A3	C-PP	250V	R22 μ-M	173Z820C64		
C9A6	C-PP	250V	R47 μ-M	173Z822C64		
C9B1	C-E	400V	470 μ-M	186Z582N26		
C9B2	C-PP	630V	R047 μ-K	172Z650A41		
C9B4	C-C	50V	R01 μ-Z	142P433A2		
C9B5	C-E	50V	100 μ-M	181Z242T10		
C9B6	C-C	2KV	B-220p-K	155Z309B61		
C9B7	C-TF	50V	2200p-J	171Z066A10		
C9B9	C-TF	50V	2200p-J	171Z066A10		
C9C1	C-TF	50V	6800p-J	171Z072A10		
C9C2	C-TF	50V	R1 μ-J	171Z023A10		
C9C4	C-C		2200p-M	155Z483B40		
C9C6	C-C		2200p-M	155Z483B40		
C9C7	C-C		2200p-M	155Z483B40		
C9C8	C-E	35V	100 μ-M	180Z242D10		
C9C9	C-E	35V	100 μ-M	180Z242D10		
C9D2	C-C	2KV	B-220p-K	155Z309B61		
C9D7	C-E	160V	330 μ-M	186Z336N01		
C9D8	C-E	100V	100 μ-M	181Z333T10		
C9D9	C-E	35V	1000 μ-M	181Z218T50		
C9E1	C-E	25V	1000 μ-M	181Z178T50		
C9E3	C-E	250V	10 μ-M	181Z388T50		
C9E4	C-E	25V	470 μ-M	181Z175T10		
C9E5	C-C	50V	R01 μ-Z	142P433A2		
C9E6	C-C	50V	R01 μ-Z	142P433A2		
C9E7	C-E	50V	100 μ-M	181Z242T10		
C9F7	C-E	50V	10 μ-M	180Z288D10		
C9G1	C-E	100V	22 μ-M	180Z369D10		
C9G3	C-PP	100V	R1 μ-J	172Z224A40		
C9G4	C-TF	50V	R1 μ-J	171Z023A10		
C9G2	C-E	50V	33 μ-M	180Z290D10		
D5A1	D	FMP-G3FS		264Z183A10		
D5A2	D	EG01		264P057A1		
D5A3	D	EM01Z		264P049A10		
D5A4	D	RG2		264P057A		
D5A7	D	RP-1H		264P167A3		
D5A8	D	ERD09-15H		264P173A1		
D5A9	D	EU2/EU02		264Z182A10		
D5B1	D	EM01Z		264P049A10		
D5B2	D	1SS120/1SS131		264Z192A10		
D5B3	D	1SS120/1SS131		264Z192A10		
D5B4	D	1SS120/1SS131		264Z192A10		
D5B5	ZD	HZ5C1		264P015B1		
D5B6	ZD	HZ9C3		264P097A1		
D5B7	ZD	HZT33-01		264P043A1		⚠
D5C1	D	1SS120/1SS131		264Z192A10		
D5C2	D	1SS120/1SS131		264Z192A10		
D5C3	D	1SS165		264Z204A10		
D5C5	ZD	HZ30-1		264Z511A10		
D5C6	D	EG01C		264P065A1		
D5C7	D	FML-S16S		264Z219A40		
D5C9	D	FMP-G3FS		264Z183A10		
D5D1	D	FML-S16S		264Z219A40		
D5D2	D	1SS120/1SS131		264Z192A10		
D5D3	D	1SS120/1SS131		264Z192A10		
D5D8	D	1SS120/1SS131		264Z192A10		
D5D9	ZD	HZ12A1		264P132A1		
D5E2	ZD	HZ12B1		264P102A1		
D5E3	ZD	HZ12B1		264P102A1		
D5E4	ZD	HZ12B1		264P102A1		
D5E5	ZD	HZ12B1		264P102A1		
D9A2	ZD	HZ20-2		264Z510A10		
D9A3	D	EM01Z		264P049A10		
D9A4	D	D1NL20U 4060		264Z201A10		
D9A5	D	EG01C		264P065A1		
D9A7	ZD	HZ30-1		264Z511A10		
D9A8	D	D1NL20U 4060		264Z201A10		
D9A9	D	1SS120/1SS131		264Z192A10		
D9B2	D	EM01Z		264P049A10		
D9B3	D	D3L60		264Z214A40		
D9B4	D	S2L60 4001P12.5		264Z218A50		
D9B5	D	FML-S16S		264Z214A40		
D9B6	D	S3L40 4004P20		264Z206A50		
D9B8	ZD	HZ33-1		264Z514A10		
D9B9	D	EG01C		264P065A1		
D9C1	ZD	HZ11A1		264Z512A10		
D9C2	D	D3SBA60 4001		264P041A10		
D9C3	D	1SS165		264Z204A10		
D9C4	ZD	HZ33-1		264Z514A10		
D9C5	ZD	HZ33-1		264Z514A10		
D9C6	ZD	HZ33-1		264Z514A10		
D9C7	D	D3L60		264Z214A40		
D9C8	D	1SS120/1SS131		264Z192A10		
D9C9	D	1SS120/1SS131		264Z192A10		
D9D1	D	S2L60 4001P12.5		264Z218A50		

REF NO	PART	DESCRIPTION	PART NO	PRICE(YEN)	REMARK
F9A1	FUSE SD6		283P123A1		
	FUSE CLIP		442P005A10		
IC5A1	IC	LM324	263Z257A10		
IC5A2	IC	3842	263Z235A10		
IC9A1	IC	3842	263Z235A10		
IC9A2	IC	7712	263Z229A10		
K5A1	RELAY	JK1aQ DC12V	287Z069A10		
K9A1	RELAY	G2R-1A-SKVD-AS1 DC12V	287Z053A10		
K9A2	RELAY	G5P1 DC24V	287Z052A30		
L5A1	H-LIN-COIL		333Z022-10		
L5A2	COIL	1mH	321P408A1		
L5A3	COIL	6R8mH	333P004A1		
L5A5	COIL	33μH	321Z004A13		
L5A8	SO-COPPER-WIRE		990P003A1		
L5A9	FERRITE-BEADS		321P991A1		
L9A1	LINE-FILTER	SS28V R20130	351P139A10		
L9A2	LINE-FILTER	SS28V R20130	351P139A10		
L9A5	SO-COPPER-WIRE		990P003A1		
L9A6	COIL	22μH	321P202A1		
L9A9	SO-COPPER-WIRE		990P003A1		
PC9A1	PHC	TLP634	265Z260A10		
PR9A1	PTH	PTH451C262BG 180N270	265P016A1		
Q5A1	TR	2SC2688	260C688C40		
Q5A2	TR	2SC4891-RG	260C891E50		
Q5A3	TR	RN1203/DTC-124-ES	261P004A1		
Q5A4	TR	RN1203/DTC-124-ES	261P004A1		
Q5A5	TR	2SA1265N-O	260A265B51		
Q5A7	TR	2SK947-M-F111	260K947A80		
Q5A8	TR	2SK947-M-F111	260K947A80		
Q5A9	TR	2SK947-M-F111	260K947A80		
Q5B1	TR	2SK947-M-F111	260K947A80		
Q5C1	TR	2SC4634-MBS-RB7	260C634E41		
Q5C2	TR	2SC4634-MBS-RB7	260C634E41		
Q5C3	TR	2SC2603-E.F	260C603C11		
Q5C4	TR	2SA1115-E.F	260A115B11		
Q5C5	TR	2SC4123-RG	260C123E51		
Q5C7	TR	2SA1115-E.F	260A115B11		
Q5D2	TR	2SK2358(1)	260K358C50		
Q5E1	TR	2SA1265N-O	260A265B51		
Q5E2	TR	2SC2688	260C688C40		
Q5F3	TR	2SK1484	260K484B40		
Q5F4	TR	2SA1115-E.F	260A115B11		
Q5F5	TR	2SC2603-E.F	260C603C11		
Q5G3	TR	2SC2603-E.F	260C603C11		
Q5G4	TR	2SA1115-E.F	260A115B11		
Q5G5	TR	2SK1484	260K484B40		
Q9A1	TR	2SC2603-E.F	260C603C11		
Q9A4	TR	2SC3075	260C075D40		
Q9A5	TR	2SK1796(3)	260K796B50		
Q9B1	TR	2SA1320	260A320B40		
Q9B2	TR	2SA1320	260A320B40		
Q9B3	TR	2SA1320	260A320B40		
Q9B4	TR	RN1201	260P373A4		
Q9B6	TR	RN1203/DTC124-E.S	261P004A1		
Q9B7	TR	RN1203/DTC124-E.S	261P004A1		
R5A2	R-C	1/4W 2R2K-J	103P380G1		
R5A3	R-C	1/4W 18O-J	103P354G1		
R5A4	R-C	1/4W 120K-J	103P422G1		
R5A5	R-COMP	1/2W 15-J	101P428C1		
R5A6	R-MB	1W 5R6K-J	102Z280F30		
R5A7	R-MB	1/2W 22-J	102Z062F20		
R5A8	R-COMP	1/2W 120-J	101P450C1		
R5A9	R-C	1/4W 10K-J	103P396G1		

REF NO	PART	DESCRIPTION	PART NO	PRICE(YEN)	REMARK
R5B1	R-C	1/4W 1K-J	103P372G1		
R5B2	R-C	1/4W 1K-J	103P372G1		
R5B3	R-C	1/4W 1K-J	103P372G1		
R5B4	R-C	1/4W 1K-J	103P372G1		
R5B6	R-C	1/4W 10K-J	103P396G1		
R5B7	R-C	1/4W 10K-J	103P396G1		
R5B8	R-C	1/4W 10K-J	103P396G1		
R5B9	R-C	1/4W 10K-J	103P396G1		
R5C2	R-C	1/4W 470-J	103P364G1		
R5C3	R-COMP	1/2W 180K-J	101P526C1		
R5C4	R-COMP	1/2W 180K-J	101P526C1		
R5C5	R-COMP	1/2W 180K-J	101P526C1		
R5C6	R-COMP	1/2W 220K-J	101P528C1		
R5C7	R-COMP	1/2W 220K-J	101P528C1		
R5C8	R-COMP	1/2W 220K-J	101P528C1		
R5C9	R-C	1/4W 100-J	103P348G1		
R5D1	R-COMP	1/2W 5R6M-J	101P562C1		
R5D2	R-COMP	1/2W 3R3K-J	101P484C1		
R5D3	R-C	1/4W 220-J	103P356G1		
R5D4	R-C	1/4W 100-J	103P348G1		
R5D5	SO-COPPER-WIRE		990P003A1		
R5D6	R-C	1/4W 75-J	103P345G1		
R5D7	R-COMP	1/2W 24K-J	101P505C1		
R5D8	R-COMP	1/2W 33K-J	101P508C1		
R5E1	R-COMP	1/2W 330K-J	101P532C1		
R5E2	R-COMP	1/2W 330K-J	101P532C1		
R5E3	R-COMP	1/2W 330K-J	101P532C1		
R5E4	R-COMP	1/2W 3R3K-J	101P484C1		
R5E5	R-COMP	1/2W 10-J	101P424C1		
R5E8	R-C	1/4W 5R6K-J	103P390G1		
R5E9	R-C	1/4W 22K-J	103P404G1		
R5F1	R-C	1/4W 820-J	103P370G1		
R5F2	R-C	1/4W 200K-J	103P427G1		
R5F3	R-FUSE	1/4W 2R2-J	104P038A10		
R5F4	R-FUSE	1/4W 33-J	104P066A10		
R5F5	R-MB	1/4W 9R1K-F	106Z451D12		⚠
R5F6	R-MB	1/4W 7R5K-F	106Z442D12		⚠
R5G2	R-FUSE	1/4W R22-K	104P020A13		
R5H1	R-FUSE	2W 180-J	104Z604A50		
R5H2	R-MB	1W 5R6K-J	102Z280F30		
R5H3	R-C	1/4W 2R2K-J	103P380G1		
R5H4	R-C	1/4W 2R2K-J	103P380G1		
R5H5	R-C	1/4W 330-J	103P360G1		
R5J1	R-MB	1/4W 4R7K-F	106Z418D12		
R5J2	R-MB	1/4W 56K-F	106Z540D12		
R5J3	R-MB	1/4W 56K-F	106Z540D12		
R5J4	R-MB	1/4W 4R7K-F	106Z418D12		
R5J5	R-MB	1/4W 56K-F	106Z540D12		
R5J6	R-MB	1/4W 56K-F	106Z540D12		
R5J7	R-C	1/4W 180K-J	103P426G1		
R5J8	R-C	1/4W 220-J	103P356G1		
R5K1	R-C	1/4W 1K-J	103P372G1		
R5K2	R-C	1/4W 22K-J	103P404G1		
R5K3	R-C	1/4W 8R2K-J	103P394G1		
R5K4	R-MB	1/4W 150K-F	106Z587D12		
R5K5	R-MB	1/4W 680K-F	106Z664D12		⚠
R5L1	R-COMP	1/2W 150-J	101P452C1		
R5L2	R-C	1/4W 18-J	103P330G1		
R5L3	R-C	1/4W 22K-J	103P404G1		
R5L4	R-C	1/4W 1K-J	103P372G1		
R5L5	R-C	1/4W 150K-J	103P424G1		
R5L6	R-FUSE	1/4W 1K-J	104P102A1		
R5L7	R-FUSE	1/2W 47-J	104P240A50		
R5L8	R-C	1/4W 12K-J	103P398G1		
R5M1	R-C	1/4W 22K-J	103P404G1		
R5M2	R-MB	3W 56K-J	102Z644F60		
R5M3	R-MB	2W R33-J	102Z358F50		
R5M4	SO-COPPER-WIRE		990P003A1		
R5M7	R-C	1/4W 22K-J	103P404G1		
R5N1	R-MB	1W 1R5-J	102Z194F30		
R5N2	R-MB	1W 1R5-J	102Z194F30		
R5N3	R-COMP	1/2W 15-J	101P428C1		
R5N4	R-CE	5W 220-K	105Z386G33		
R5N9	R-C	1/4W 470-J	103P364G1		
R5P1	R-C	1/4W 1K-J	103P372G1		
R5P2	R-FUSE	1/4W 6R8-J	104P050A10		
R5P3	R-C	1/4W 1K-J	103P372G1		

REF. NO	PART	DESCRIPTION		PART NO	PRICE(YEN)	REMARK
R5P4	R-MB	3W	680-J	102Z598F60		
R5Q1	R-C	1/4W	1K-J	103P372G1		
R5Q2	R-FUSE	1/4W	6R8-J	104P050A10		
R5Q3	R-C	1/4W	470-J	103P364G1		
R5Q4	R-C	1/4W	1K-J	103P372G1		
R5Q8	R-C	1/4W	1M-J	103P444G1		
R5R1	R-C	1/4W	1M-J	103P444G1		
R5R2	R-C	1/4W	390K-J	103P434G1		⚠
R5R3	R-MB	2W	39K-J	102Z480F50		
R5R5	R-C	1/4W	47-J	103P340G1		
R5R4	R-C	1/4W	2R4K-J	103P381G1		
R9A1	R-FUSE	1R6W	10-J	104Z894F60		
R9A4	R-COMP	1/2W	220K-J	101P528C1		
R9A5	R-MB	3W	56K-J	102Z644F60		
R9A6	R-MB	3W	56K-J	102Z644F60		
R9A7	R-MB	3W	33K-J	102Z638F60		
R9A8	R-COMP	1/2W	220K-J	101P528C1		
R9A9	R-C	1/4W	18K-J	103P402G1		
R9B1	R-C	1/4W	470K-J	103P436G1		
R9B2	R-FUSE	1/2W	22-J	104Z232A50		⚠
R9B3	R-FUSE	1/4W	1K-J	104P102A1		⚠
R9B4	R-C	1/4W	22K-J	103P404G1		
R9B5	R-MB	2W	12-J	102Z396F50		
R9B6	R-MB	2W	R27-J	102Z356F50		
R9B7	R-C	1/4W	2K-J	103P379G1		
R9C1	R-C	1/4W	18-J	103P330G1		
R9C3	R-COMP	1/2W	56-J	101Z142C10		
R9C6	R-COMP	1/2W	470K-K	101P536B13		
R9C8	R-C	1/4W	13K-J	103P399G1		
R9C9	R-C	1/4W	10K-J	103P396G1		
R9D1	R-C	1/4W	1K-J	103P372G1		
R9D2	R-C	1/4W	10K-J	103P396G1		
R9D3	SO-COPPER-WIRE			990P003A1		
R9D4	R-FUSE	1/4W	R22-K	104P020A13		
R9D5	R-FUSE	1/4W	1R2-J	104P032A1		
R9D6	R-FUSE	1/4W	R22-K	104P020A13		
R9D8	R-FUSE	1/4W	10-J	104P054A10		
R9D9	R-C	1/4W	1K-J	103P372G1		
R9E2	R-FUSE	1/4W	15-J	104P058A1		
R9E7	R-FUSE	1/4W	R22-K	104P020A13		
R9F2	R-C	1/4W	15K-J	103P400G1		
R9F3	R-C	1/4W	1K-J	103P372G1		
R9F4	R-C	1/4W	39K-J	103P410G1		
R9F5	R-C	1/4W	56K-J	103P414G1		
R9F6	R-C	1/4W	12K-J	103P398G1		
R9F8	R-C	1/4W	3K-J	103P383G1		
R9F9	R-C	1/4W	10K-J	103P396G1		
R9G1	R-C	1/4W	180K-J	103P426G1		
R9G5	R-FUSE	1/4W	1R2-J	104P032A1		
R9G6	R-MB	2W	2R2K-J	102Z450F50		
R9G7	R-C	1/4W	1M-J	103P444G1		
R9H1	R-FUSE	1/4W	22-J	104P062A1		
T5A1	FBT		334Z016-01	334Z016-01		⚠
T5A2	VARIABLE B TRANS		350Z037-01	350Z037-01		
T5A3	HDT		336Z005-10	336Z005-10		
T5A4	HDT		336Z005-10	336Z005-10		
T9A1	MAIN TRANS		350Z036-01	350Z036-01		
VR5A1	VR	B-100K		120Z062B96		
VR5A2	VR	B-200K		120Z103B68		
VR5A1	VR	B-100K		120Z062B96		
VR5A2	VR	B-200K		120Z103B68		
VR9A1	VR	B-500		120Z053B45		
C5B2	EYELET			679D022-2		
A	CONNECTOR		2PIN	452P051A1		
C	CONNECTOR		2PIN	452P051A1		
F	CONNECTOR		4PIN	452P304A1		
H	CONNECTOR		3PIN	452P303A1		

REF. NO	PART	DESCRIPTION	PART NO	PRICE(YEN)	REMARK
J	CONNECTOR	11PIN	452P311A1		
K	CONNECTOR	10PIN	452P310A1		
L	CONNECTOR	10PIN	452P310A1		
U1	CONNECTOR	2PIN	452P051A1		
U2	CONNECTOR	2PIN	452P051A1		
X	CONNECTOR	3PIN	452P303A1		
Y1	CONNECTOR	2PIN	452P051A1		
Y3	CONNECTOR	3PIN	452Z712A10		
DY1	GT-PIN	φ2.36	452D031A1		
	RADIATOR(FOR Q9A5)		590P026A10		
	RADIATOR(FOR Q5D2)		590P027A10		
	RADIATOR(FOR Q5C1,Q5C2)		595D313-10		
	RADIATOR(FOR IC9A2,Q5A8)		590P002A1		
	PWB-MAIN		210R038-10		

DWG. TITLE : ASSY-PWB-VIDEO

DWG. NO. : T950T029

REF. NO	PART	DESCRIPTION		PART NO	PRICE(YEN)	REMARK
C2R1	C-E	25V	47μ-M	180Z201D10		
C2G1	C-E	25V	47μ-M	180Z201D10		
C2B1	C-E	25V	47μ-M	180Z201D10		
C2R2	C-C	25V	R1μ-Z	142Z919A23		
C2G2	C-C	25V	R1μ-Z	142Z919A23		
C2B2	C-C	25V	R1μ-Z	142Z919A23		
C2R3	C-C	25V	R1μ-Z	142Z919A23		
C2G3	C-C	25V	R1μ-Z	142Z919A23		
C2B3	C-C	25V	R1μ-Z	142Z919A23		
C2R4	C-E	50V	2R2μ-M	180Z285D10		
C2G4	C-E	50V	2R2μ-M	180Z285D10		
C2B4	C-E	50V	2R2μ-M	180Z285D10		
C2R5	C-E	25V	47μ-M	180Z201D10		
C2G5	C-E	25V	47μ-M	180Z201D10		
C2B5	C-E	25V	47μ-M	180Z201D10		
C2R6	C-C	50V	SL-82p-J	142P232A2		
C2G6	C-C	50V	SL-82p-J	142P232A2		
C2B6	C-C	50V	SL-82p-J	142P232A2		
C2R7	C-E NP	100V	1μ-M	182Z214F10		
C2G7	C-E NP	100V	1μ-M	182Z214F10		
C2B7	C-E NP	100V	1μ-M	182Z214F10		
C2R8	C-E	160V	1μ-M	180Z404D10		
C2G8	C-E	160V	1μ-M	180Z404D10		
C2B8	C-E	160V	1μ-M	180Z404D10		
C2R9	C-C	500V	E-4700p-P	141Z415A24		
C2G9	C-C	500V	E-4700p-P	141Z415A24		
C2B9	C-C	500V	E-4700p-P	141Z415A24		
C2RA	C-E NP	16V	47μ-M	182Z561B10		
C2GA	C-E NP	16V	47μ-M	182Z561B10		
C2BA	C-E NP	16V	47μ-M	182Z561B10		
C2RB	C-E NP	16V	47μ-M	182Z561B10		
C2GB	C-E NP	16V	47μ-M	182Z561B10		
C2BB	C-E NP	16V	47μ-M	182Z561B10		
C2RD	C-C	50V	B-1000p-K	142P372A2		
C2GD	C-C	50V	B-1000p-K	142P372A2		
C2BD	C-C	50V	B-1000p-K	142P372A2		
C201	C-E	35V	100μ-M	180Z242D10		
C202	C-C	25V	R1μ-Z	142Z919A23		
C203	C-C	50V	R01μ-Z	142P433A2		
C204	C-E	25V	47μ-M	180Z201D10		
C205	C-E	35V	100μ-M	180Z242D10		
C206	C-C	50V	B-470p-K	142P368A2		
C207	C-C	500V	E-R01μ-P	141Z418A24		
C211	C-E	25V	220μ-M	180Z203D10		
C212	C-E	100V	33μ-M	180Z370D10		
C213	C-E	160V	47μ-M	180Z411D50		
C214	C-C	50V	B-560p-K	142P369A2		
C215	C-C	50V	B-560p-K	142P369A2		
C216	C-C	50V	R01μ-Z	142P433A2		
C217	C-E	16V	100μ-M	180Z152D10		
C218	C-C	50V	B-560p-K	142P369A2		
C219	C-C	50V	B-560p-K	142P369A2		
C220	C-C	50V	R01μ-Z	142P433A2		
C222	C-E	16V	100μ-M	183Z322B10		

REF. NO	PART	DESCRIPTION	PART NO	PRICE(YEN)	REMARK
C225	C-E	16V 100μ-M	183Z322B10		
C226	C-E	16V 100μ-M	183Z322B10		
C229	C-E	16V 100μ-M	180Z152D10		
C230	C-C	50V R01μ-Z	142P433A2		
C233	C-C	50V R01μ-Z	142P433A2		
C234	C-E	25V 47μ-M	180Z201D10		
C235	C-C	50V B-220p-K	142P364A2		
C703	C-E	50V 10μ-M	180Z288D10		
C704	C-E	50V 10μ-M	180Z288D10		
C705	C-E	50V 10μ-M	180Z288D10		
C706	C-E NP	25V 10μ-M	182Z098F10		
C707	C-E NP	25V 10μ-M	182Z098F10		
C708	C-E NP	25V 10μ-M	182Z098F10		
C801	C-E	16V 100μ-M	180Z152D10		
C802	C-E	25V 47μ-M	180Z201D10		
C803	C-C	25V R1μ-Z	142Z919A23		
C804	C-E	50V 22μ-M	180Z289D10		
C805	C-C	25V R1μ-Z	142Z919A23		
C806	C-E	50V 22μ-M	180Z289D10		
C808	C-C	25V R1μ-Z	142Z919A23		
C809	C-C	25V R1μ-Z	142Z919A23		
C810	C-C	25V R1μ-Z	142Z919A23		
C811	C-C	25V R1μ-Z	142Z919A23		
C812	C-C	25V R1μ-Z	142Z919A23		
C813	C-C	25V R1μ-Z	142Z919A23		
C814	C-C	25V R1μ-Z	142Z919A23		
C815	C-C	25V R1μ-Z	142Z919A23		
C817	C-C	25V R1μ-Z	142Z919A23		
C818	C-C	25V R1μ-Z	142Z919A23		
C819	C-C	25V R1μ-Z	142Z919A23		
C820	C-C	25V R1μ-Z	142Z919A23		
C821	C-C	25V R1μ-Z	142Z919A23		
C822	C-C	25V R1μ-Z	142Z919A23		
C823	C-C	25V R1μ-Z	142Z919A23		
C824	C-C	25V R1μ-Z	142Z919A23		
C825	C-C	50V SL-22p-J	142P218A2		
C826	C-C	50V SL-27p-J	142P220A2		
C827	C-C	25V R1μ-Z	142Z919A23		
C828	C-C	25V R1μ-Z	142Z919A23		
C829	C-C	25V R1μ-Z	142Z919A23		
C830	C-E	25V 47μ-M	180Z201D10		
C831	C-C	50V B-100p-K	142P360A2		
C832	C-TF	50V 3300p-J	171Z068A10		
C833	C-TF	50V 3300p-J	171Z068A10		
C834	C-C	50V B-4700p-K	142P380A2		
C835	C-E	50V 1μ-M	180Z284D10		
C836	C-E	50V R47μ-M	180Z283D10		
C837	C-TF	50V R047μ-J	171Z019A10		
C838	C-C	50V R01μ-Z	142P433A2		
C839	C-E	50V 4R7μ-M	180Z287D10		
C840	C-E	50V 4R7μ-M	180Z287D10		
C842	C-C	50V B-100p-K	142P360A2		
C843	C-C	50V B-1000p-K	142P372A2		
C845	C-E	50V 10μ-M	180Z288D10		
C846	C-E	50V 1μ-M	180Z284D10		
C847	C-E	50V 1μ-M	180Z284D10		
C849	C-C	50V R01μ-Z	142P433A2		
C850	C-C	50V B-100p-K	142P360A2		
C851	C-C	50V B-100p-K	142P360A2		
C852	C-C	50V R01μ-Z	142P433A2		
C853	C-C	50V R01μ-Z	142P433A2		
C854	C-TF	50V R012μ-J	171Z075A10		
D2R3	D	1SS120/1SS131	264Z192A10		
D2G3	D	1SS120/1SS131	264Z192A10		
D2B3	D	1SS120/1SS131	264Z192A10		
D2R6	D	1SS83	264P067A1		
D2G6	D	1SS83	264P067A1		
D2B6	D	1SS83	264P067A1		
D2R8	D	1SS120/1SS131	264Z192A10		
D2G8	D	1SS120/1SS131	264Z192A10		
D2B8	D	1SS120/1SS131	264Z192A10		
D2R9	D	1SS120/1SS131	264Z192A10		
D2G9	D	1SS120/1SS131	264Z192A10		

REF. NO	PART	DESCRIPTION	PART NO	PRICE(YEN)	REMARK
D2B9	D	1SS120/1SS131	264Z192A10		
D2RA	D	1SS120/1SS131	264Z192A10		
D2GA	D	1SS120/1SS131	264Z192A10		
D2BA	D	1SS120/1SS131	264Z192A10		
D2RB	D	1SS120/1SS131	264Z192A10		
D2GB	D	1SS120/1SS131	264Z192A10		
D2BB	D	1SS120/1SS131	264Z192A10		
D2RC	D	1SS120/1SS131	264Z192A10		
D2GC	D	1SS120/1SS131	264Z192A10		
D2BC	D	1SS120/1SS131	264Z192A10		
D2RD	D	1SS120/1SS131	264Z192A10		
D2GD	D	1SS120/1SS131	264Z192A10		
D2BD	D	1SS120/1SS131	264Z192A10		
D201	D	EM01Z	264P049A10		
D202	ZD	HZ7B2	264P019A1		
D203	ZD	HZ7B2	264P019A1		
D204	ZD	HZ7B2	264P019A1		
D205	ZD	HZ7B2	264P019A1		
D206	D	1SS120/1SS131	264Z192A10		
D703	D	1SS120/1SS131	264Z192A10		
D704	D	1SS120/1SS131	264Z192A10		
D705	D	1SS120/1SS131	264Z192A10		
D801	ZD	HZ4A1	264Z516A10		
D802	D	1SS120/1SS131	264Z192A10		
D803	D	1SS120/1SS131	264Z192A10		
D804	D	1SS120/1SS131	264Z192A10		
D805	D	1SS120/1SS131	264Z192A10		
D806	D	1SS120/1SS131	264Z192A10		
D807	D	1SS120/1SS131	264Z192A10		
D808	D	1SS120/1SS131	264Z192A10		
D809	D	1SS120/1SS131	264Z192A10		
D810	D	1SS120/1SS131	264Z192A10		
D811	D	1SS120/1SS131	264Z192A10		
D812	D	1SS120/1SS131	264Z192A10		
D813	D	1SS120/1SS131	264Z192A10		
D814	D	1SS120/1SS131	264Z192A10		
D815	D	1SS120/1SS131	264Z192A10		
D816	D	1SS120/1SS131	264Z192A10		
D817	D	1SS120/1SS131	264Z192A10		
D818	D	1SS120/1SS131	264Z192A10		
D819	D	1SS120/1SS131	264Z192A10		
D820	D	1SS120/1SS131	264Z192A10		
D821	D	1SS120/1SS131	264Z192A10		
D824	D	1SS120/1SS131	264Z192A10		
D825	D	1SS120/1SS131	264Z192A10		
D826	D	1SS120/1SS131	264Z192A10		
D827	D	1SS120/1SS131	264Z192A10		
D828	D	1SS120/1SS131	264Z192A10		
IC201	IC	M52327SP	263Z250A10		
IC202	IC	74LS157	263P046A1		
IC203	IC	VPS10	263Z272A10		
IC801	IC	263Z273-20	263Z273-20		
IC802	IC	M62358	263Z103A10		
IC803	IC	AT93C66	263Z305A10		
IC804	IC	74HC74	263Z253A10		
IC805	IC	LM393	263Z254A10		
IC806	IC	74HC14	263Z255A10		
IC807	IC	74HC393	263Z256A10		
IC809	IC	M52036SP	263Z258A10		
IC810	IC	78L05	263Z106A10		
IC811	IC	74LS123	263P045A1		
	IC SOCKET(FOR IC803) ICC-05-008-360		448Z008A40		
L201	COIL	100μH	321P054A10		
L203	COIL	22μH	321P004B1		
L204	COIL	22μH	321P004B1		
L205	COIL	47μH	321P021A10		
L212	COIL	22μH	321P004B1		

REF. NO.	PART	DESCRIPTION	PART NO.	PRICE(YEN)	REMARK
Q2R1	TR	2SC3504	260C504D40		
Q2G1	TR	2SC3504	260C504D40		
Q2B1	TR	2SC3504	260C504D40		
Q2R6	TR	2SA1320	260A320B40		
Q2G6	TR	2SA1320	260A320B40		
Q2B6	TR	2SA1320	260A320B40		
Q2R7	TR	2SC2999	260C999C10		
Q2G7	TR	2SC2999	260C999C10		
Q2B7	TR	2SC2999	260C999C10		
Q2R8	TR	2SC2999	260C999C10		
Q2G8	TR	2SC2999	260C999C10		
Q2B8	TR	2SC2999	260C999C10		
Q201	TR	RN1203/DTC-124-E.S	261P004A1		
Q202	TR	2SC2603-F	260C603C13		
Q203	TR	RN1203/DTC-124-E.S	261P004A1		
Q204	TR	2SC2603-E.F	260C603C11		
Q205	TR	2SC2603-E.F	260C603C11		
Q701	TR	2SC2603-E.F	260C603C11		
Q702	TR	2SC2603-E.F	260C603C11		
Q703	TR	2SC2603-E.F	260C603C11		
Q704	TR	2SC2603-E.F	260C603C11		
Q705	TR	2SC2603-E.F	260C603C11		
Q706	TR	2SC2603-E.F	260C603C11		
Q802	TR	RN1201	260P373A4		
Q803	TR	RN1201	260P373A4		
Q804	TR	RN1201	260P373A4		
Q805	TR	RN1201	260P373A4		
Q806	TR	RN1201	260P373A4		
Q807	TR	2SC2603-E.F	260C603C11		
Q808	TR	2SA1115-E.F	260A115B11		
Q809	TR	2SC2603-F	260C603C13		
Q810	TR	2SC2603-E.F	260C603C11		
Q811	TR	2SC2603-E.F	260C603C11		
Q813	TR	RN1201	260P373A4		
Q814	TR	RN1201	260P373A4		
Q818	TR	RN1203/DTC-124-E.S	261P004A1		
Q819	TR	RN1203/DTA-124-E.S	261P003A1		
Q820	TR	RN1203/DTC-124-E.S	261P004A1		
R2R2	R-C	1/4W 22K-J	103P404G1		
R2G2	R-C	1/4W 27K-J	103P406G1		
R2B2	R-C	1/4W 22K-J	103P404G1		
R2R3	R-C	1/4W 33K-J	103P408G1		
R2G3	R-C	1/4W 24K-J	103P405G1		
R2B3	R-C	1/4W 33K-J	103P408G1		
R2R4	R-C	1/4W 680-J	103P368G1		
R2G4	R-C	1/4W 680-J	103P368G1		
R2B4	R-C	1/4W 680-J	103P368G1		
R2R5	R-C	1/4W 180-J	103P354G1		
R2G5	R-C	1/4W 180-J	103P354G1		
R2B5	R-C	1/4W 180-J	103P354G1		
R2R6	R-C	1/4W 220-J	103P356G1		
R2G6	R-C	1/4W 220-J	103P356G1		
R2B6	R-C	1/4W 220-J	103P356G1		
R2R7	SO-COPPER-WIRE		990P003A1		
R2G7	SO-COPPER-WIRE		990P003A1		
R2B7	SO-COPPER-WIRE		990P003A1		
R2R9	R-C	1/4W 100-J	103P348G1		
R2G9	R-C	1/4W 100-J	103P348G1		
R2B9	R-C	1/4W 100-J	103P348G1		
R2RC	R-C	1/4W 120-J	103P350G1		
R2GC	R-C	1/4W 180-J	103P354G1		
R2BC	R-C	1/4W 68-J	103P344G1		
R2RH	R-C	1/4W 330K-J	103P432G1		
R2GH	R-C	1/4W 330K-J	103P432G1		
R2BH	R-C	1/4W 330K-J	103P432G1		
R2RJ	R-C	1/4W 100K-J	103P420G1		
R2GJ	R-C	1/4W 100K-J	103P420G1		
R2BJ	R-C	1/4W 100K-J	103P420G1		
R2RK	R-C	1/4W 12K-J	103P398G1		
R2GK	R-C	1/4W 12K-J	103P398G1		
R2BK	R-C	1/4W 12K-J	103P398G1		
R2RM	R-MB	1/4W 75-F	106Z214D12		
R2GM	R-MB	1/4W 75-F	106Z214D12		
R2BM	R-MB	1/4W 75-F	106Z214D12		
R2RN	R-C	1/4W 8R2K-J	103P394G1		
R2GN	R-C	1/4W 8R2K-J	103P394G1		
R2BN	R-C	1/4W 8R2K-J	103P394G1		
R2RP	R-C	1/4W 15K-J	103P400G1		
R2GP	R-C	1/4W 15K-J	103P400G1		
R2BP	R-C	1/4W 15K-J	103P400G1		
R2RQ	R-C	1/4W 10-J	103P324G1		
R2GQ	R-C	1/4W 10-J	103P324G1		
R2BQ	R-C	1/4W 10-J	103P324G1		
R2RR	R-C	1/4W 8R2K-J	103P394G1		
R2GR	R-C	1/4W 8R2K-J	103P394G1		
R2BR	R-C	1/4W 8R2K-J	103P394G1		
R2RS	R-C	1/4W 15K-J	103P400G1		
R2GS	R-C	1/4W 15K-J	103P400G1		
R2BS	R-C	1/4W 15K-J	103P400G1		
R2RT	R-C	1/4W 10-J	103P324G1		
R2GT	R-C	1/4W 10-J	103P324G1		
R2BT	R-C	1/4W 10-J	103P324G1		
R2RU	R-C	1/4W 220-J	103P356G1		
R2GU	R-C	1/4W 220-J	103P356G1		
R2BU	R-C	1/4W 220-J	103P356G1		
R2RV	R-MB	1/4W 75-F	106Z214D12		
R2GV	R-MB	1/4W 75-F	106Z214D12		
R2BV	R-MB	1/4W 75-F	106Z214D12		
R2RW	R-C	1/4W 4R7K-J	103P388G1		
R2GW	R-C	1/4W 4R7K-J	103P388G1		
R2BW	R-C	1/4W 4R7K-J	103P388G1		
R201	R-C	1/4W 10K-J	103P396G1		
R202	R-C	1/4W 1K-J	103P372G1		
R203	R-C	1/4W 22K-J	103P404G1		
R204	R-C	1/4W 100-J	103P348G1		
R205	R-C	1/4W 43K-J	103P411G1		
R206	R-C	1/4W 4R7K-J	103P388G1		
R207	R-C	1/4W 12K-J	103P398G1		
R209	R-C	1/4W 6R8K-J	103P392G1		
R211	R-C	1/4W 1K-J	103P372G1		
R212	R-C	1/4W 1K-J	103P372G1		
R215	R-C	1/4W 120-J	103P350G1		
R216	R-C	1/4W 10K-J	103P396G1		
R217	R-C	1/4W 120-J	103P350G1		
R218	R-C	1/4W 1K-J	103P372G1		
R219	R-C	1/4W 1K-J	103P372G1		
R220	R-C	1/4W 1K-J	103P372G1		
R221	R-C	1/4W 10K-J	103P396G1		
R222	R-C	1/4W 4R7K-J	103P388G1		
R227	R-C	1/4W 47K-J	103P412G1		
R228	R-C	1/4W 39K-J	103P410G1		
R703	R-C	1/4W 1K-J	103P372G1		
R704	R-C	1/4W 8R2K-J	103P394G1		
R705	R-C	1/4W 15K-J	103P400G1		
R706	R-C	1/4W 1K-J	103P372G1		
R707	R-C	1/4W 1K-J	103P372G1		
R708	R-C	1/4W 8R2K-J	103P394G1		
R709	R-C	1/4W 15K-J	103P400G1		
R710	R-C	1/4W 1K-J	103P372G1		
R711	R-C	1/4W 270K-J	103P430G1		
R712	R-C	1/4W 68K-J	103P416G1		
R713	R-C	1/4W 12K-J	103P398G1		
R714	R-C	1/4W 270K-J	103P430G1		
R715	R-C	1/4W 68K-J	103P416G1		
R716	R-C	1/4W 12K-J	103P398G1		
R717	R-C	1/4W 1K-J	103P372G1		
R718	R-C	1/4W 8R2K-J	103P394G1		
R719	R-C	1/4W 15K-J	103P400G1		
R720	R-C	1/4W 1K-J	103P372G1		
R721	R-C	1/4W 270K-J	103P430G1		
R722	R-C	1/4W 68K-J	103P416G1		
R723	R-C	1/4W 12K-J	103P398G1		
R724	R-C	1/4W 1K-J	103P372G1		
R725	R-C	1/4W 1K-J	103P372G1		
R726	R-C	1/4W 1K-J	103P372G1		
R801	R-C	1/4W 2R2K-J	103P380G1		
R802	R-C	1/4W 1K-J	103P372G1		
R803	R-C	1/4W 1K-J	103P372G1		

REF. NO.	PART	DESCRIPTION		PART NO.	PRICE(YEN)	REMARK
R804	R-C	1/4W	1K-J	103P372G1		
R805	R-C	1/4W	1K-J	103P372G1		
R806	R-C	1/4W	1K-J	103P372G1		
R807	R-C	1/4W	4R7K-J	103P388G1		
R808	R-C	1/4W	1K-J	103P372G1		
R809	R-C	1/4W	240K-J	103P429G1		
R810	R-C	1/4W	4R7K-J	103P388G1		
R811	R-C	1/4W	4R7K-J	103P388G1		
R812	R-C	1/4W	3R9K-J	103P386G1		
R814	R-C	1/4W	4R7K-J	103P388G1		
R815	R-C	1/4W	4R7K-J	103P388G1		
R824	R-C	1/4W	560-J	103P366G1		
R825	R-C	1/4W	7R5-J	103Z321G10		
R826	R-C	1/4W	2R2K-J	103P380G1		
R827	R-C	1/4W	2R2K-J	103P380G1		
R829	R-C	1/4W	4R7K-J	103P388G1		
R830	R-C	1/4W	4R7K-J	103P388G1		
R831	R-C	1/4W	4R7K-J	103P388G1		
R832	R-C	1/4W	10-J	103P324G1		
R833	R-C	1/4W	47-J	103P340G1		
R834	R-C	1/4W	47-J	103P340G1		
R835	R-C	1/4W	47-J	103P340G1		
R836	R-C	1/4W	4R7K-J	103P388G1		
R837	R-C	1/4W	18K-J	103P402G1		
R838	R-C	1/4W	1K-J	103P372G1		
R839	R-C	1/4W	1K-J	103P372G1		
R840	R-C	1/4W	3R3K-J	103P384G1		
R842	R-C	1/4W	6R8K-J	103P392G1		
R843	R-C	1/4W	6R8K-J	103P392G1		
R845	R-C	1/4W	3R9K-J	103P386G1		
R846	R-C	1/4W	100K-J	103P420G1		
R847	R-C	1/4W	47K-J	103P412G1		
R848	R-C	1/4W	1K-J	103P372G1		
R849	R-C	1/4W	15K-J	103P400G1		
R850	R-C	1/4W	1K-J	103P372G1		
R851	R-C	1/4W	47K-J	103P412G1		
R852	R-C	1/4W	18K-J	103P402G1		
R853	R-C	1/4W	220-J	103P356G1		
R854	R-C	1/4W	10K-J	103P396G1		
R855	R-C	1/4W	470-J	103P364G1		
R857	R-C	1/4W	1K-J	103P372G1		
R858	R-C	1/4W	1K-J	103P372G1		
R859	R-C	1/4W	4R7K-J	103P388G1		
R860	R-C	1/4W	750-J	103P369G1		
R861	R-C	1/4W	620-J	103P367G1		
R862	R-C	1/4W	22K-J	103P404G1		
R863	R-C	1/4W	6R8K-J	103P392G1		
R865	R-C	1/4W	4R7K-J	103P388G1		
R867	R-C	1/4W	4R7K-J	103P388G1		
R868	R-C	1/4W	10K-J	103P396G1		
R869	R-C	1/4W	12K-J	103P398G1		
R870	R-C	1/4W	470-J	103P364G1		
R871	R-C	1/4W	12K-J	103P398G1		
R872	R-C	1/4W	15K-J	103P400G1		
VR2R1	VR	B-200K		120Z103B67		
VR2G1	VR	B-200K		120Z103B67		
VR2B1	VR	B-200K		120Z103B67		
VR201	VR	B-10K		120Z058B44		
VR202	VR	B-20K		120Z059B44		
VR802	VR	B-2K		120Z055B44		
X801	X'TAL	HC-49U3H/AT-49 4.9152M		285Z004A10		
CN201	D-SUB 15PIN			452P920A20		
CN202	BNC			452P912A1		
K	CONNECTOR		10PIN	452P410A1		
L	CONNECTOR		10PIN	452P410A1		
M	CONNECTOR		5PIN	452P305A1		
N	CONNECTOR		13PIN	452P313A1		
O	CONNECTOR		4PIN	452P304A1		
S	CONNECTOR		16PIN	452P416A1		
T	CONNECTOR		4PIN	452P404A1		
R	CONNECTOR		3PIN	452P303A2		
G	CONNECTOR		3PIN	452P303A1		

REF. NO.	PART	DESCRIPTION	PART NO.	PRICE(YEN)	REMARK
B	CONNECTOR	3PIN	452P303A4		
Y4	CONNECTOR	3PIN	452P303A1		
Y5	CONNECTOR	4PIN	452P304A1		
Y6	CONNECTOR	2PIN	452P302A1		
	RADIATOR(FOR IC203)		590Z004A01		
	PWB-VIDEO		210R039-10		

DWG TITLE : ASSY-PWB-DEFL
DWG. NO. : T950T030

REF. NO.	PART	DESCRIPTION		PART NO.	PRICE(YEN)	REMARK
C302	C-C	50V	R01 μ-Z	142P433A2		
C304	C-E	16V	1000 μ-M	180Z158D50		
C305	C-C	50V	R01 μ-Z	142P433A2		
C306	C-MF-PP	50V	1800p-H	172Z863A14		
C308	C-TF	50V	R01 μ-J	171Z074A10		
C309	C-E	50V	1 μ-M	180Z284D10		
C310	C-E	50V	1 μ-M	180Z284D10		
C311	C-TF	50V	3900p-J	171Z069A10		
C312	C-C	50V	B-470p-K	142P368A2		
C313	C-TF	50V	1000p-J	171Z062A10		
C314	C-E	100V	1 μ-M	180Z364D10		
C315	C-C	50V	B-100p-K	142P360A2		
C316	C-C	50V	R01 μ-Z	142P433A2		
C317	C-C	50V	R01 μ-Z	142P433A2		
C318	C-E NP	50V	1 μ-M	182Z154F10		
C319	C-C	50V	R01 μ-Z	142P433A2		
C320	C-C	50V	R01 μ-Z	142P433A2		
C321	C-E	50V	1 μ-M	180Z284D10		
C322	C-E	50V	1 μ-M	180Z284D10		
C401	C-E	50V	220 μ-M	180Z293D10		
C402	C-C	50V	R01 μ-Z	142P433A2		
C403	C-E	35V	2200 μ-M	180Z249D50		
C404	C-TF	50V	R1 μ-J	171Z023A10		
C405	C-E	25V	4700 μ-M	180Z211D50		
C406	C-E	35V	100 μ-M	180Z242D10		
C407	C-TF	50V	R12 μ-J	171Z024A10		
C408	C-TF	50V	R12 μ-J	171Z024A10		
C409	C-TF	50V	R12 μ-J	171Z024A10		
C410	C-TF	50V	R1 μ-J	171Z023A10		
C411	C-TF	50V	R33 μ-J	171Z030A10		
C412	C-TF	100V	R22 μ-J	171Z127A10		
C413	C-E	50V	10 μ-M	180Z288D10		
C414	C-E	100V	1 μ-M	180Z364D10		
C415	C-C	50V	R01 μ-Z	142P433A2		
C416	C-E NP	50V	1 μ-M	182Z154F10		
C417	C-E	100V	1 μ-M	180Z364D10		
C418	C-E	50V	1 μ-M	180Z284D10		
C419	C-C	50V	B-100p-K	142P360A2		
C420	C-E NP	50V	R47 μ-M	182Z153F10		
C421	C-E	50V	1 μ-M	180Z284D10		
C423	C-E NP	50V	10 μ-M	182Z158F10		
C424	C-E NP	50V	10 μ-M	182Z158F10		
C425	C-E	50V	100 μ-M	180Z292D10		
C426	C-E	50V	2R2 μ-M	180Z285D10		
C427	C-E	50V	33 μ-M	180Z290D10		
C428	C-C	50V	B-1000p-K	142P372A2		
C429	C-E	16V	22 μ-M	183Z319D10		
C430	C-E	35V	100 μ-M	180Z242D10		
C431	C-TF	50V	R47 μ-J	171Z032A10		
C432	C-E	35V	100 μ-M	180Z242D10		
C433	C-E	35V	100 μ-M	180Z242D10		
C434	C-E NP	50V	1 μ-M	182Z154F10		
C435	C-E	50V	33 μ-M	180Z290D10		
C436	C-E	35V	100 μ-M	180Z242D10		
C437	C-E NP	16V	100 μ-M	182Z072F10		
C438	C-E	16V	2200 μ-M	180Z168D50		
C439	C-C	25V	R1 μ-Z	142Z919A23		
C440	C-E NP	50V	10 μ-M	182Z158F10		
C441	C-C	50V	R01 μ-Z	142P433A2		
C501	C-C	50V	R01 μ-Z	142P433A2		
C503	C-C	50V	R01 μ-Z	142P433A2		

REF. NO.	PART	DESCRIPTION		PART NO.	PRICE(YEN)	REMARK
C504	C-TF	50V	R047μ-J	171Z019A10		
C505	C-C	50V	R01μ-Z	142P433A2		
C506	C-E NP	50V	4R7μ-M	182Z157F10		
C507	C-TF	50V	R1μ-J	171Z023A10		
C509	C-E NP	16V	22μ-M	182Z559B10		
C510	C-E	50V	1μ-M	180Z284D10		
C511	C-E	100V	47μ-M	180Z371D10		
C512	C-C	50V	R01μ-Z	142P433A2		
C513	C-C	50V	R01μ-Z	142P433A2		
C514	C-C	50V	R01μ-Z	142P433A2		
C515	C-C	50V	R01μ-Z	142P433A2		
C516	C-E	50V	4R7μ-M	183Z417D10		
C517	C-E	50V	R22μ-M	183Z411D10		
C518	C-C	50V	R01μ-Z	142P433A2		
C519	C-C	50V	R01μ-Z	142P433A2		
C520	C-E	50V	10μ-M	183Z418D10		
C521	C-C	50V	B-220p-K	142P364A2		
C523	C-C	500V	SL-22p-J	141Z268A20		
C524	C-C	50V	B-100p-K	142P360A2		
C525	C-E	16V	470μ-M	180Z155D10		
C526	C-E	50V	22μ-M	180Z289D10		
C527	C-E	50V	R1μ-M	180Z280D10		
C528	C-TF	50V	R1μ-J	171Z023A10		
C529	C-E	50V	10μ-M	180Z288D10		
C530	C-E	50V	10μ-M	180Z288D10		
C531	C-C	50V	B-3300p-K	142P378A2		
C532	C-E NP	50V	1μ-M	182Z154F10		
C533	C-E	35V	100μ-M	180Z242D10		
C534	C-E	50V	22μ-M	180Z289D10		
C535	C-E	50V	33μ-M	180Z290D10		
C536	C-E	50V	22μ-M	180Z289D10		
C537	C-TF	50V	R1μ-J	171Z023A10		
C538	C-E	16V	220μ-M	180Z153D10		
C539	C-C	500V	SL-82p-K	141Z282A21		
C540	C-E	50V	1μ-M	180Z284D10		
C542	C-C	50V	R01μ-Z	142P433A2		
C543	C-C	500V	B-680p-K	141Z354A21		
C544	C-C	50V	B-100p-K	142P360A2		
C601	C-C	1KV	E-R01μ-Z	155Z210A31		
C602	C-C	2KV	B-1000p-K	155Z174A61		
C603	C-C	2KV	B-1000p-K	155Z174A61		
D302	SO-COPPER-WIRE			990P003A1		
D303	D	1SS120/1SS131		264Z192A10		
D401	D	EM01Z		264P049A10		
D402	D	1SS120/1SS131		264Z192A10		
D403	D	1SS120/1SS131		264Z192A10		
D404	D	1SS120/1SS131		264Z192A10		
D405	D	1SS120/1SS131		264Z192A10		
D406	D	1SS120/1SS131		264Z192A10		
D407	D	1SS120/1SS131		264Z192A10		
D408	D	1SS120/1SS131		264Z192A10		
D409	D	1SS120/1SS131		264Z192A10		
D410	D	1SS120/1SS131		264Z192A10		
D411	D	1SS120/1SS131		264Z192A10		
D414	D	1SS120/1SS131		264Z192A10		
D415	ZD	HZ12A1		264P132A1		
D416	D	1SS120/1SS131		264Z192A10		
D417	D	1SS120/1SS131		264Z192A10		
D418	D	1SS120/1SS131		264Z192A10		
D419	ZD	HZ24-2L		264Z522A10		
D501	D	1SS120/1SS131		264Z192A10		
D502	D	1SS120/1SS131		264Z192A10		
D503	D	1SS120/1SS131		264Z192A10		
D504	ZD	HZ6C2		264P017B1		
D505	D	EG01		264P057A1		
D506	ZD	HZ5B3		264Z519A10		
D507	D	1SS120/1SS131		264Z192A10		
D508	D	1SS120/1SS131		264Z192A10		
D509	D	1SS120/1SS131		264Z192A10		
D510	ZD	HZ12A1		264P132A1		
D511	D	1SS120/1SS131		264Z192A10		
D514	D	1SS120/1SS131		264Z192A10		
D515	ZD	HZ4B3		264Z508A10		

REF. NO.	PART	DESCRIPTION		PART NO.	PRICE(YEN)	REMARK
D516	D	1SS120/1SS131		264Z192A10		
D517	D	EM01Z		264P049A10		
IC301	IC	LA7858		263Z091A10		
IC302	IC	LM324		263Z257A10		
IC303	IC	LM324		263Z257A10		
IC401	IC	TDA1675A		263Z232A20		
IC402	IC	4558		263P037A1		
IC403	IC	M5109		263P082A1		
IC501	IC	LM324		263Z257A10		
IC502	IC	LM324		263Z257A10		
IC503	IC	LM324		263Z257A10		
IC504	IC	BA6110		263Z098A10		
IC505	IC	BA6110		263Z098A10		
IC506	IC	BA6110		263Z098A10		
IC507	IC	74LS123		263P045A1		
IC508	IC	M5109		263P082A1		
IC509	IC	BA6110		263Z098A10		
L301	COIL	22μH		321P004B1		
L401	COIL	22μH		321P004B1		
L501	COIL	470μH		321Z003A31		
L502	COIL	470μH		321Z003A31		
L601	SO-COPPER-WIRE			990P003A1		
NE6R1	NEON LAMP	AG15PC122FB-K2M		202Z501A10		
NE6G1	NEON LAMP	AG15PC122FB-K2M		202Z501A10		
NE6B1	NEON LAMP	AG15PC122FB-K2M		202Z501A10		
NE602	NEON LAMP	AG15PC122FB-K2M		202Z501A10		
Q301	TR	DTC-124-ES		261P004A1		
Q302	TR	2SC2236		260C236C40		
Q304	TR	2SC2603-E, F		260C603C11		
Q305	TR	RN1201		260P373A4		
Q306	TR	2SC2655		260C655C40		
Q307	TR	2SA1020		260A020B11		
Q308	TR	2SC2655		260C655C40		
Q309	TR	2SA1020		260A020B11		
Q401	TR	2SA1304		260A304B40		
Q402	TR	2SC2603-E, F		260C603C11		
Q403	TR	2SC2603-E, F		260C603C11		
Q404	TR	2SA1115-E, F		260A115B11		
Q405	TR	2SC2603-E, F		260C603C11		
Q406	TR	2SC3296		260C296D40		
Q407	TR	2SC2603-E, F		260C603C11		
Q408	TR	2SA1115-E, F		260A115B11		
Q409	TR	2SC2603-E, F		260C603C11		
Q410	TR	2SC2603-E, F		260C603C11		
Q502	TR	2SA1115-E, F		260A115B11		
Q503	TR	2SA1115-E, F		260A115B11		
Q504	TR	2SA1115-E, F		260A115B11		
Q505	TR	2SC2603-E, F		260C603C11		
Q506	TR	2SA1115-E, F		260A115B11		
Q507	TR	2SC2603-E, F		260C603C11		
Q508	TR	2SC2603-E, F		260C603C11		
Q509	TR	2SC2603-E, F		260C603C11		
Q511	TR	2SA1115-E, F		260A115B11		
Q512	TR	2SA1115-E, F		260A115B11		
Q513	TR	2SC2603-E, F		260C603C11		
R301	SO-COPPER-WIRE			990P003A1		
R302	R-C	1/4W	470-J	103P364G1		
R303	R-C	1/4W	110K-J	103P421G1		
R306	R-MB	1/4W	18K-F	106Z482D12		
R307	R-MB	1/4W	18K-F	106Z482D12		
R308	R-C	1/4W	1K-J	103P372G1		
R309	R-C	1/4W	1K-J	103P372G1		
R310	R-C	1/4W	47K-J	103P412G1		

REF. NO.	PART	DESCRIPTION		PART NO.	PRICE(YEN)	REMARK
R311	R-C	1/4W	47K-J	103P412G1		
R312	R-C	1/4W	3R9K-J	103P386G1		
R315	SO-COPPER-WIRE			990P003A1		
R316	R-C	1/4W	1R5K-J	103P376G1		
R317	R-C	1/4W	6R8K-J	103P392G1		
R318	R-C	1/4W	220-J	103P356G1		
R319	R-C	1/4W	22K-J	103P404G1		
R320	R-C	1/4W	12K-J	103P398G1		
R321	R-C	1/4W	2R2K-J	103P380G1		
R322	R-C	1/4W	1R8K-J	103P378G1		
R323	R-C	1/4W	22K-J	103P404G1		
R324	R-C	1/4W	7R5K-J	103P393G1		
R325	R-MB	1/4W	1K-F	106Z342D12		
R326	R-C	1/4W	100-J	103P348G1		
R327	R-MB	1/4W	1K-F	106Z342D12		
R328	R-C	1/4W	100-J	103P348G1		
R329	R-MB	1W	3R3-J	102Z202F30		
R330	R-C	1/4W	470-J	103P364G1		
R331	R-MB	1W	3R3-J	102Z202F30		
R332	R-MB	2W	47-J	102Z410F50		
R333	R-C	1/4W	470-J	103P364G1		
R334	R-MB	1W	R22-J	102Z174F30		
R335	R-MB	2W	33-J	102Z406F50		
R336	R-C	1/4W	6R8K-J	103P392G1		
R337	R-C	1/4W	10K-J	103P396G1		
R338	R-C	1/4W	10K-J	103P396G1		
R339	R-C	1/4W	10K-J	103P396G1		
R340	R-C	1/4W	10K-J	103P396G1		
R341	R-C	1/4W	10K-J	103P396G1		
R342	R-C	1/4W	10K-J	103P396G1		
R343	R-C	1/4W	10K-J	103P396G1		
R344	R-C	1/4W	10K-J	103P396G1		
R345	R-C	1/4W	33K-J	103P408G1		
R346	R-C	1/4W	10K-J	103P396G1		
R347	R-C	1/4W	10K-J	103P396G1		
R348	R-C	1/4W	47K-J	103P412G1		
R349	R-C	1/4W	10K-J	103P396G1		
R350	R-C	1/4W	10K-J	103P396G1		
R351	R-C	1/4W	4R7K-J	103P388G1		
R352	R-C	1/4W	10K-J	103P396G1		
R353	R-C	1/4W	10K-J	103P396G1		
R354	R-C	1/4W	10K-J	103P396G1		
R355	R-C	1/4W	33K-J	103P408G1		
R356	R-C	1/4W	10K-J	103P396G1		
R357	R-C	1/4W	10K-J	103P396G1		
R358	R-C	1/4W	39K-J	103P410G1		
R359	R-C	1/4W	10K-J	103P396G1		
R360	R-C	1/4W	47K-J	103P412G1		
R361	R-C	1/4W	100-J	103P348G1		
R362	R-C	1/4W	100-J	103P348G1		
R401	R-C	1/4W	10K-J	103P396G1		
R402	R-COMP	1/2W	470-J	101P464C1		
R403	R-MB	1/4W	2R4K-F	106Z383D12		
R404	R-MB	1/4W	1R2K-F	106Z350D12		
R405	R-C	1/4W	120-J	103P350G1		
R406	R-C	1/4W	56K-J	103P414G1		
R407	R-C	1/4W	300K-J	103P431G1		
R408	R-MB	1/4W	7R5K-F	106Z442D12		
R409	R-C	1/4W	2R2K-J	103P380G1		
R410	R-C	1/4W	4R7K-J	103P388G1		
R411	SO-COPPER-WIRE			990P003A1		
R412	R-FUSE	1/4W	R2-J	104P038A10		
R413	R-C	1/4W	10-J	103P324G1		
R414	R-C	1/4W	1K-J	103P372G1		
R415	R-MB	3W	10-J	102Z554F60		
R416	R-MB	3W	68-J	102Z574F60		
R417	R-COMP	1/2W	2R2-J	101P408C1		
R418	R-COMP	1/2W	2R2-J	101P408C1		
R419	R-MB	3W	68-J	102Z574F60		
R420	R-FUSE	1/4W	270-J	104P088A10		
R422	R-MB	1W	1-J	102Z190F30		
R423	R-C	1/4W	1R8K-J	103P378G1		
R424	R-C	1/4W	12K-J	103P398G1		
R425	R-C	1/4W	5R6K-J	103P390G1		
R426	R-C	1/4W	2M-J	103Z451C10		
R427	R-C	1/4W	47K-J	103P412G1		

REF. NO.	PART	DESCRIPTION		PART NO.	PRICE(YEN)	REMARK
R428	R-C	1/4W	120K-J	103P422G1		
R429	R-C	1/4W	1M-J	103P444G1		
R430	R-MB	1/4W	6R8K-F	106Z437D12		
R431	R-MB	1/4W	39K-F	106Z521D12		
R432	R-C	1/4W	6R8K-J	103P392G1		
R433	R	1/6W	910-J	109Z027A10		
R434	R-C	1/4W	1R8K-J	103P378G1		
R435	R-C	1/4W	27K-J	103P406G1		
R436	R-C	1/4W	330-J	103P360G1		
R437	R-C	1/4W	10K-J	103P396G1		
R438	R-C	1/4W	470-J	103P364G1		
R439	R-C	1/4W	56K-J	103P414G1		
R440	R-C	1/4W	2R2K-J	103P380G1		
R441	R-C	1/4W	3R9K-J	103P386G1		
R442	R-C	1/4W	220-J	103P356G1		
R443	R-C	1/4W	1K-J	103P372G1		
R444	R-C	1/4W	15K-J	103P400G1		
R445	R-C	1/4W	18K-J	103P402G1		
R446	R-C	1/4W	10K-J	103P396G1		
R447	R-C	1/4W	220-J	103P356G1		
R448	R-C	1/4W	3R3K-J	103P384G1		
R449	R-C	1/4W	56K-J	103P414G1		
R450	R-C	1/4W	3R3K-J	103P384G1		
R451	R-C	1/4W	1R5K-J	103P376G1		
R452	R-C	1/4W	220-J	103P356G1		
R453	R-C	1/4W	4R7K-J	103P388G1		
R454	R-MB	1W	270-J	102Z248F30		
R455	R-C	1/4W	27-J	103P334G1		
R456	R-MB	1/4W	1R8K-F	106Z369D12		
R457	R-C	1/4W	270-J	103P358G1		
R458	R-C	1/4W	330-J	103P360G1		
R459	R-C	1/4W	220-J	103P356G1		
R460	R-C	1/4W	100-J	103P348G1		
R461	R-C	1/4W	5R6K-J	103P390G1		
R462	R-MB	1/4W	3K-F	106Z394D12		
R463	R-MB	1/4W	2K-F	106Z374D12		
R464	R-C	1/4W	680-J	103P368G1		
R466	R-C	1/4W	39K-J	103P410G1		
R467	R-C	1/4W	220K-J	103P428G1		
R468	R-C	1/4W	33K-J	103P408G1		
R469	R-C	1/4W	5R6K-J	103P390G1		
R470	R-C	1/4W	330-J	103P360G1		
R471	R-C	1/4W	22K-J	103P404G1		
R472	R-C	1/4W	120-J	103P350G1		
R473	R-C	1/4W	5R6K-J	103P390G1		
R474	R-C	1/4W	3R3K-J	103P384G1		
R421	R-C	1/4W	4R7K-J	103P388G1		
R501	R-C	1/4W	1K-J	103P372G1		
R502	R-C	1/4W	2R2K-J	103P380G1		
R504	R-C	1/4W	10K-J	103P396G1		
R505	SO-COPPER-WIRE			990P003A1		
R506	SO-COPPER-WIRE			990P003A1		
R511	R-C	1/4W	4R7K-J	103P388G1		
R512	R-C	1/4W	27K-J	103P406G1		
R513	R-C	1/4W	27K-J	103P406G1		
R514	R-C	1/4W	27K-J	103P406G1		
R515	R-C	1/4W	100K-J	103P420G1		
R516	R-C	1/4W	27K-J	103P406G1		
R517	R-C	1/4W	27K-J	103P406G1		
R518	R-C	1/4W	240K-J	103P429G1		
R519	R-MB	1/4W	1R5K-F	106Z360D12		
R520	R-MB	1/4W	1K-F	106Z342D12		
R521	R-C	1/4W	10K-J	103P396G1		
R522	R-C	1/4W	4R7K-J	103P388G1		
R523	R-C	1/4W	7R5K-J	103P393G1		
R524	R-C	1/4W	2R2K-J	103P380G1		
R525	R-C	1/4W	27K-J	103P406G1		
R526	R-C	1/4W	3R3K-J	103P384G1		
R527	R-C	1/4W	33K-J	103P408G1		
R528	R-C	1/4W	1M-J	103P444G1		
R529	R-C	1/4W	10K-J	103P396G1		
R530	R-C	1/4W	10K-J	103P396G1		
R531	R-C	1/4W	6R8K-J	103P392G1		
R532	R-C	1/4W	7R5K-J	103P393G1		
R533	R-C	1/4W	22K-J	103P404G1		
R534	R-C	1/4W	10K-J	103P396G1		

REF. NO.	PART	DESCRIPTION		PART NO.	PRICE(YEN)	REMARK
R535	R-C	1/4W	4R7K-J	103P388G1		
R536	R-C	1/4W	56K-J	103P414G1		
R537	SO-COPPER-WIRE			990P003A1		
R538	R-C	1/4W	1K-J	103P372G1		
R539	R-C	1/4W	5R6K-J	103P390G1		
R540	R-C	1/4W	10K-J	103P396G1		
R541	R-C	1/4W	10K-J	103P396G1		
R542	R-C	1/4W	56K-J	103P414G1		
R543	R-C	1/4W	12K-J	103P398G1		
R544	R-C	1/4W	3R3K-J	103P384G1		
R545	R-C	1/4W	27K-J	103P406G1		
R546	R-C	1/4W	100K-J	103P420G1		
R547	R-C	1/4W	10K-J	103P396G1		
R548	R-C	1/4W	10K-J	103P396G1		
R549	R-C	1/4W	10K-J	103P396G1		
R550	R-C	1/4W	56K-J	103P414G1		
R551	R-C	1/4W	22K-J	103P404G1		
R552	R-C	1/4W	27K-J	103P406G1		
R553	R-C	1/4W	3R3K-J	103P384G1		
R554	R-C	1/4W	4R7K-J	103P388G1		
R555	R-C	1/4W	10K-J	103P396G1		
R556	R-C	1/4W	10K-J	103P396G1		
R557	R-C	1/4W	56K-J	103P414G1		
R558	R-C	1/4W	160K-J	103P425G1		
R559	R-C	1/4W	33K-J	103P408G1		
R560	R-C	1/4W	22K-J	103P404G1		
R561	R-C	1/4W	27K-J	103P406G1		
R562	R-COMP	1/2W	1K-J	101P472C1		
R563	R-C	1/4W	1K-J	103P372G1		
R564	R-C	1/4W	30K-J	103P407G1		
R565	R-C	1/4W	10K-J	103P396G1		
R566	R-C	1/4W	10K-J	103P396G1		
R567	R-C	1/4W	36K-J	103P409G1		
R568	R-COMP	1/2W	270-J	101P458C1		
R569	R-C	1/4W	22K-J	103P404G1		
R570	R-C	1/4W	10K-J	103P396G1		
R571	R-C	1/4W	68K-J	103P416G1		
R572	R-C	1/4W	5R6K-J	103P390G1		
R573	R-MB	1/4W	27K-F	106Z502D12		
R574	R-C	1/4W	56K-J	103P414G1		
R575	R-C	1/4W	2R2K-J	103P380G1		
R576	R-C	1/4W	3R3K-J	103P384G1		
R577	R-C	1/4W	1R5K-J	103P376G1		
R578	R-C	1/4W	220-J	103P356G1		
R579	R-C	1/4W	220-J	103P356G1		
R580	R-C	1/4W	100-J	103P348G1		
R581	R-C	1/4W	4R7K-J	103P388G1		
R582	R-C	1/4W	1R2K-J	103P374G1		
R583	R-C	1/4W	680-J	103P368G1		
R584	R-C	1/4W	470-J	103P364G1		
R585	R-C	1/4W	10K-J	103P396G1		
R586	R-C	1/4W	1R8K-J	103P378G1		
R587	R-C	1/4W	100-J	103P348G1		
R588	R-C	1/4W	330-J	103P360G1		
R589	R-C	1/4W	1R2K-J	103P374G1		
R590	R-C	1/4W	330-J	103P360G1		
R591	R-C	1/4W	1R8K-J	103P378G1		
R592	R-C	1/4W	10K-J	103P396G1		
R593	R-C	1/4W	560-J	103P366G1		
R594	R-MB	2W	15K-J	102Z470F50		
R595	R-C	1/4W	18K-J	103P402G1		
R596	R-C	1/4W	10K-J	103P396G1		
R597	R-C	1/4W	120-J	103P350G1		
R598	R-C	1/4W	22K-J	103P404G1		
R599	R-C	1/4W	470-J	103P364G1		
R5S1	R-C	1/4W	330-J	103P360G1		
R5S2	R-C	1/4W	2R2K-J	103P380G1		
R5S3	R-C	1/4W	33K-J	103P408G1		
R5S4	R-C	1/4W	220K-J	103P428G1		
R5S5	R	1/6W	3K-J	109Z012A10		
R5S6	R-MB	1/4W	2R2K-F	106Z378D12		
R5S8	R-C	1/4W	3R3K-J	103P384G1		
R5S9	R-C	1/4W	820-J	103P370G1		
R5T2	R-C	1/4W	1K-J	103P372G1		
R5T3	SO-COPPER-WIRE			990P003A1		
R5T6	R-C	1/4W	47K-J	103P412G1		
R5T7	R-FUSE	1/4W	10K-J	104P126A1		
R5T8	R-FUSE	1/4W	5R6K-J	104P120A10		
R5U2	R-C	1/4W	2R4K-J	103P381G1		
R5U3	R-C	1/4W	150K-J	103P424G1		
R5U4	R-MB	3W	33-J	102Z566F60		
R5U5	R-C	1/4W	10K-J	103P396G1		
R5U6	SO-COPPER-WIRE			990P003A1		
R5U9	R-C	1/4W	20K-J	103P403G1		
R5V1	R-C	1/4W	10K-J	103P396G1		
R5V2	R-MB	1/4W	4R02K-F	106Z410D12		
R5V3	R-C	1/4W	1R2K-J	103P374G1		
R5V4	R-C	1/4W	1K-J	103P372G1		
R5V5	R-C	1/4W	10K-J	103P396G1		
R5V6	R-MB	1/4W	1R1K-F	106Z346D12		
R5V7	R-MB	1/4W	1K-F	106Z342D12		
R5V8	R-C	1/4W	10K-J	103P396G1		
R5V9	R-MB	1/4W	2R2K-F	106Z378D12		
R5W1	R-C	1/4W	3R3K-J	103P384G1		
R5W2	R-C	1/4W	47K-J	103P412G1		
R5W3	R-C	1/4W	10K-J	103P396G1		
R5W4	R-C	1/4W	10K-J	103P396G1		
R5W5	R-C	1/4W	56K-J	103P414G1		
R5W6	R-C	1/4W	27K-J	103P406G1		
R5W7	R-C	1/4W	6R8K-J	103P392G1		
R5W8	R-C	1/4W	1R5K-J	103P376G1		
R5W9	R-C	1/4W	10K-J	103P396G1		
R5X1	R-C	1/4W	47K-J	103P412G1		
R6R1	R-COMP	1/2W	56-J	101P442C10		
R6G1	R-COMP	1/2W	56-J	101P442C10		
R6B1	R-COMP	1/2W	56-J	101P442C10		
R601	R-COMP	1/2W	22K-J	101P504C1		
S801	SW	EVQPAC07K		129Z018A10		
S802	SW	EVQPAC07K		129Z018A10		
S803	SW	EVQPAC07K		129Z018A10		
S901	POWER-SW	ESB99897V		129Z019A01		
V602	CRT SOCKET	HPS0440-011180		449P015A10		
VR301	VR	B-50K		120Z061B45		
VR302	VR	B-50K		120Z061B45		
VR401	VR	B-100K		120Z062B45		
VR402	VR	B-2K		120Z055B45		
VR404	VR	B-3K		120Z056B45		
VR501	VR	B-30K		120Z060B45		
VR502	VR	B-300K		120Z064B45		
VR505	VR	B-500		120Z053B45		
F	CONNECTOR		4PIN	452P304A1		
H	CONNECTOR		3PIN	452P303A1		
J	CONNECTOR		11PIN	452P311A1		
M	CONNECTOR		5PIN	452P305A1		
N	CONNECTOR		13PIN	452P313A1		
O	CONNECTOR		4PIN	452P304A1		
P	CONNECTOR		2PIN	452P058A1		
T	CONNECTOR		4PIN	452P404A1		
R	CONNECTOR		3PIN	452P303A2		
G	CONNECTOR		3PIN	452P303A1		
B	CONNECTOR		3PIN	452P303A4		
TP-SS	CONNECTOR		2PIN	452P402A1		
RIGHT	CONNECTOR		2PIN	452P302A1		
LEFT	CONNECTOR		2PIN	452P302A1		
CENT	CONNECTOR		2PIN	452P302A1		
X	CONNECTOR		3PIN	452P303A1		
U1	CONNECTOR		2PIN	452P051A1		
U2	CONNECTOR		2PIN	452P051A1		
V-DY-2	CONNECTOR		3PIN	452Z711A10		
SC	GT-PIN		φ2.36	452D031A1		
TP-SC	TEST PIN			452P800A1		
	RADIATOR(FOR IC401)			590Z005A01		
S901	EYELET		φ2.5	679D022-40		
	PWB-DEFL			210R040-10		

DWG. TITLE : ASSY-PWB-POWER
DWG. NO. : T950T034

REF. NO	PART	DESCRIPTION		PART NO.	PRICE(YEN)	REMARK
C901	C-E	50V	47μ-M	180Z291D10		
C902	C-PP	630V	R047μ-K	172Z650A41		
C905	C-TF	50V	4700p-J	171Z070A10		
C906	C-TF	50V	R022μ-J	171Z078A10		
C907	C-TF	50V	1500p-J	171Z064A10		
C908	C-TF	50V	2200p-J	171Z066A10		
C909	C-TF	50V	R1μ-J	171Z023A10		
C912	C-E	25V	100μ-M	180Z202D10		
C914	C-E	25V	100μ-M	180Z202D10		
C915	C-C	50V	R01μ-Z	142P433A2		
C917	C-E	16V	3300μ-M	180Z160D50		
C918	C-C	50V	R01μ-Z	142P433A2		
C919	C-E	16V	3300μ-M	180Z160D50		
C920	C-E	25V	100μ-M	180Z202D10		
C921	C-C	50V	R01μ-Z	142P433A2		
C922	C-E	25V	100μ-M	180Z202D10		
C923	C-E	50V	2R2μ-M	180Z285D10		
C924	C-E	50V	2R2μ-M	180Z285D10		
C929	C-E	50V	2R2μ-M	180Z285D10		
C931	C-C	25V	R1μ-Z	142Z919A23		
C932	C-C	50V	R01μ-Z	142P433A2		
C933	C-C	50V	R01μ-Z	142P433A2		
C934	C-E	50V	10μ-M	180Z288D10		
C936	C-TF	50V	2200p-J	171Z066A10		
C937	C-C	50V	R01μ-Z	142P433A2		
D901	ZD	HZ20-3		264P022A1		
D902	D	EM01Z		264P049A10		
D903	D	D1NL20U		264P155A1		
D904	D	EG01C		264P065A1		
D907	ZD	HZ30-2		264Z520A10		
D908	D	1SS120/1SS131		264Z192A10		
D909	D	1SS120/1SS131		264Z192A10		
D910	D	D1NL20U		264P155A1		
D913	D	D4L20U		264Z213A40		
D914	D	1SS120/1SS131		264Z192A10		
D915	D	1SS120/1SS131		264Z192A10		
D916	D	1SS120/1SS131		264Z192A10		
D917	D	1SS120/1SS131		264Z192A10		
D920	ZD	HZ27-2		264P165A3		
IC901	IC	3842		263Z235A10		
IC902	IC	7812		263P034A1		
IC903	IC	7705		263Z231A10		
IC904	IC	SI-3050CA		263Z268A20		
IC905	IC	M51953		263Z104A10		
PC901	PHC	TLP634		265Z260A10		
Q901	TR	2SC4615-D.E		260C615E40		
Q902	TR	2SK2275		260K275C40		
Q903	TR	RN1203/DTC124-E.S		261P004A1		
Q904	TR	RN1203/DTC124-E.S		261P004A1		
Q905	TR	RN1203/DTC124-E.S		261P004A1		
Q906	TR	RN1203/DTC124-E.S		261P004A1		
Q907	TR	RN1203/DTC124-E.S		261P004A1		
R901	R-COMP	1/2W	220K-J	101P528C1		
R902	R-COMP	1/2W	220K-J	101P528C1		
R903	R-MB	3W	12K-J RSS	102Z628F60		
R904	R-MB	3W	12K-J RSS	102Z628F60		
R905	R-FUSE	1/4W	R22-K	104P020A13		
R906	R-MB	3W	56K-J RSS	102Z644F60		
R908	R-C	1/4W	22K-J	103P404G1		
R909	R-C	1/4W	5R6K-J	103P390G1		
R910	R-C	1/4W	3R9K-J	103P386G1		
R911	R-C	1/4W	150K-J	103P424G1		
R912	R-FUSE	1/4W	2R7K-J	104P112A1		
R913	R-C	1/4W	22K-J	103P404G1		
R914	R-MB	1W	1R8-J RSS	102Z196F50		
R915	R-FUSE	1/4W	22-J	104P062A1		
R916	R-C	1/4W	7R5K-J	103P393G1		
R917	R-C	1/4W	10K-J	103P396G1		
R919	FUSE	SSFR	800mA	283Z003A10		
R922	R-C	1/4W	10K-J	103P396G1		
R923	R-MB	1/4W	430-F	106Z299D12		
R925	R-MB	1/4W	2R2K-F	106Z378D12		
R926	R-C	1/4W	1K-J	103P372G1		
R927	FUSE	SSFR	3.15A	283Z004A10		
R928	R-C	1/4W	10K-J	103P396G1		
R929	R-C	1/4W	2R2K-J	103P380G1		
R930	R-C	1/4W	10K-J	103P396G1		
R931	R-C	1/4W	1K-J	103P372G1		
R932	R-C	1/4W	4R7K-J	103P388G1		
SC902	SCR	DRA03TE		269Z003A40		
T901	SUB-TRANS			350Z038B10		
VR901	VR	B-5K		120Z057B44		
Y1	CONNECTOR		2PIN	452P051A1		
Y3	CONNECTOR		3PIN	452Z712A10		
Y4	CONNECTOR		3PIN	452P303A1		
Y5	CONNECTOR		4PIN	452P304A1		
Y6	CONNECTOR		2PIN	452P302A1		
	RADIATOR(FOR IC904)			590P037A10		
	PWB-POWER			210R045-10		

MECHANICAL PARTS LIST

DWG. TITLE : ASSY-PWB-MAIN
DWG. NO. : T950S069

REF. NO		PART	DESCRIPTION	PART NO.	PRICE(YEN)	REMARK
15		RADIATOR-M		590S076-01		
18		FERRITE-CORE(BP59RB160100140M)		332P010-10		
19		GUM-PAD		683V009-01		
20		COOL-SHEET	TC-20AG	221P002-10		
21		SPACER	TCBS-8N	540Z042-01		
22		EDGING	EWSE-3-01	540Z043-01		
23		CABLE-TIES	GT-100M	540P310-10		
24		MINI-CLAMP	UAMS-03-0	540Z002-10		
25		SCREW-BTV	3×8	669P700-10		
26		SCREW-BTV	4×10	669P702-10		
27		SCREW-SEMS-K	M3×10	669P151-10		
30		SILICONE-GREASE	YG6260	090Z007-10		
31		CLEAN-COAT	TC-90L	080Z001-10		
34	J1	LEAD-CONNECTOR		246T050-14		
35	D	LEAD-CONNECTOR		246T050-22		
36	E5	LEAD-CONNECTOR		246T050-26		
37	J3	LEAD-CONNECTOR		246T050-15		
38	E7	LEAD-CONNECTOR		246T050-32		

DWG. TITLE : ASSY-PWB-VIDEO
DWG. NO. : T950T029

REF. NO		PART	DESCRIPTION	PART NO.	PRICE(YEN)	REMARK
15		SCREW-SEMS-B	M3×6	669P099-10		
16		SCREW-SEMS-B	M3×12	669P102-10		
18		SILICONE-GUM	TSE3940	090Z001-10		
19		COOL-SHEET		222V021-01		
21		CLEAN-COAT	TC-90L	080Z001-10		
22		LEAD-WIRE		246T013-04		
23	J2	LEAD-CONNECTOR		246T050-18		
24		LEAD-WIRE		246V013-01		
25		SHIELD-VIDEO		590S067-01		

DWG. TITLE : ASSY-PWB-DEFL
DWG. NO. : T950T030

REF. NO		PART	DESCRIPTION	PART NO	PRICE(YEN)	REMARK
15		SCREW-SEMS-K	M3×10	669P151-10		
20		SILICONE-GREASE	YG6260	090Z007-10		
21		CLEAN-COAT	TC-90L	080Z001-10		
24	Q	LEAD-CONNECTOR		246T050-10		
25	E3	LEAD-CONNECTOR		246T050-24		
26	E4	LEAD-CONNECTOR		246T050-25		
30		SPACER	KGTS-5T	540Z019-04		

DWG. TITLE : ASSY-PWB-POWER
DWG. NO : T950T034

REF. NO		PART	DESCRIPTION	PART NO	PRICE(YEN)	REMARK
11		CLEAN-COAT	TC-90L	080Z001-10		
12		SILCONE-GREASE	YG6260	090Z007-10		
15		SCREW-SEMS-K	M3×10	669P151-10		
18	E3	LEAD-CONNECTOR		246T050-24		

DWG. TITLE : ASSY-MONITOR
DWG. NO. : T950R050

REF. NO		PART	DESCRIPTION	PART NO	PRICE(YEN)	REMARK
0	N	LEAD-CONNECTOR		246T050-07		
1	O	LEAD-CONNECTOR		246T050-08		
2	X	LEAD-CONNECTOR		246T050-09		
3	R	LEAD-CONNECTOR		246T050-11		
4	G	LEAD-CONNECTOR		246T050-12		
5	B	LEAD-CONNECTOR		246T050-13		
6	Y1	LEAD-CONNECTOR		246T050-27		
7	S	LEAD-CONNECTOR		246T050-16		
8	T	LEAD-CONNECTOR		246T050-17		
9	Y3	LEAD-CONNECTOR		246T050-28		
10	U1	LEAD-CONNECTOR		246T050-19		
11	U2	LEAD-CONNECTOR		246T050-20		
12	E2	LEAD-CONNECTOR		246T030-03		
13	E1	LEAD-CONNECTOR		246T045-09		
14	EW	LEAD-CONNECTOR		246T050-23		
15	Y	LEAD-CONNECTOR		246T050-29		
16	L	LEAD-CONNECTOR		246T050-30		
18		SPOILER		90901184		
19		SPOILER		90901052		
20		MAG-PLATE M-594(58854900)				
21		ADHESIVE-DIABOND	DN297A 1g	090Z012-10		
22		DF-ADHESIVE-TAPE	#575 L=10mm	890P329-10		
23		ACETATE-TAPE	570F L=150mm	890P306-10		
24		LOCK-PAINT	0.5g			
33		FRONT-CABINET		700T012-01		
34		BACK-COVER		700R022-02		
35		ASSY-TILT-STAND		770T010-01		
37		SHIELD-TOP		590R083-01		
38		BOTTOM-PLATE		590R071-01		
39		HOLDER-CHASSIS-L		590R072-01		
40		HOLDER-CHASSIS-R		590R072-02		
41		BOTTOM-M		590R073-01		
42		HOLDER-VIDEO		590R074-01		
43		HOLDER-DF		590S075-01		
44		HOLDER-SW		590T063-01		
48		COIL-DEGAUSSING		409Z015-01		⚠
49		COIL-CANCEL		409Z016-01		
52		CRT(WITH ITC)		251Z040-01(MF-8617A)		⚠
				251Z044-01(MF-8617A-T)		⚠
54		SCREW-BTV	3×8	669P700-10		
55		SCREW-BTV	4×10	669P702-10		
56		SCREW-BTV	4×12	669P718-01		
57		SCREW-TB FLAT	3×8 AB BLACK	669P603-10		
58		SCREW-SEMS-M4×6		669P759-20		
59		SCREW-TSAH 5×20	MC	669P773-20		
60		SCREW-SEMS-B	M3×6	669P099-10		
61		SCREW-BTB-N!	4×45	669P716-01		
62		SCREW-FE-HEX	GMM-C25Y6-1	669P997-01		
63		WASHER-SPRING	M3	668P100-10		
64		WASHER-TOOTHED	M4	668P302-10		
65		LOCK-WASHER		668P250-10		
66		GUM-WASHER	t= 2.5	683V001-02		
67		GASKET		565Z001-01		
68		INSULATION-SHEET		223V001-01		
69		SPRING		570V003-01		
70		RF-CONNECTOR	RF-H142TD-1190	452Z514-10		
71		CONNECTOR	3PIN B3B-XH-A	452P103-10		
72		INSULATION-SHEET		223V003-01		
73		FERRITE-CORE		332Z002-01		
		(ZCAT2032-0930/KR116CC160928)				
74		LCD-UNIT	LM162ET1/LM162ET2	291Z001-01		
76		AC-INLET		454P011-10		
		(SUP-J3G-E2/GL-2030FV2)				
77		LEAD-CLAMPER	STL-600-20-01	540Z037-19		
78		LEAD-CLAMPER	=2W77	540P125-10		
79		LEAD-CLAMPER	STL-600-12-01	540Z037-17		
80		LEAD-CLAMPER	LWS-3S-2W	540P244-10		
82		SPACER	PCBEHE-8M	540Z045-01		
84		INSULATION-SHEET		225V002-01		
85		CABLE-TIES	GT-100M	540P310-10		
86		SNAP-RIVET	SR-2040B	540Z046-01		
87		SILICONE-GUM	KE-40RTV (G)	090Z009-10		
88		UL-TUBE TUT-3	AWG 3/8 20mm	073P350-30		
89	E6	LEAD-CONNECTOR		246T050-31		
90		LABEL-PWB-REVISION		851V109-01		
91		LABEL-COLOR				
92		LABEL-WARNING		851V109-01		
93	A	LEAD-CONNECTOR		246T050-21		
94	F	LEAD-CONNECTOR		246T050-01		
95	H	LEAD-CONNECTOR		246T050-02		
96	J	LEAD-CONNECTOR		246T050-03		
97	K	LEAD-CONNECTOR		246T050-04		
99	M	LEAD-CONNECTOR		246T050-06		

DWG. TITLE : ASSY-PACKING
DWG. NO. : T985S021

REF. NO	PART	DESCRIPTION	PART NO	PRICE(YEN)	REMARK
11	ASSY-MONITOR		T950R050-2		
13	LABEL-ENERGY-STAR		706V151-01		
14	LABEL-ENERGY-STAR		706V151-02		
15	RATING-PLATE	MF-8617A	706V104-09		
		MF-8617A-T	706V110-01		
16	SERIAL-LABEL	MF-8617A	851V112-04		
		MF-8617A-T	851V112-06		
17	LABEL-ERGONOMIC		851V118-01		
19	GUARANTEE-CARD	LNN	879T012-01		
20	OPERATION-MANUAL		870V060-03		
22	LABEL-TCO	MF-8617A-T ONLY	851V122-01		
23	AC-CORD	MF-8617A	500P103-20		⚠
		MF-8617A-T	500Z002-01		⚠
24	SIGNAL-CABLE		242V010-01		
27	PACKING-CASE		800T030-06		
29	PACKING-BAG(SET)		831V005-01		
30	PARTS-BAG(ACCESSORY)		831V004-03		
33	CUSHION-TOP		803S032-01		
34	CUSHION-BOTTOM		803S032-02		

REF. NO.	PART	DESCRIPTION	PART NO.	PRICE(YEN)	REMARK
37	CARTON-TAPE	L=3600mm	096Z466-70		
38	SELLO-TAPE	L=50mm	096Z470-10		
40	STRING		838V003-01		

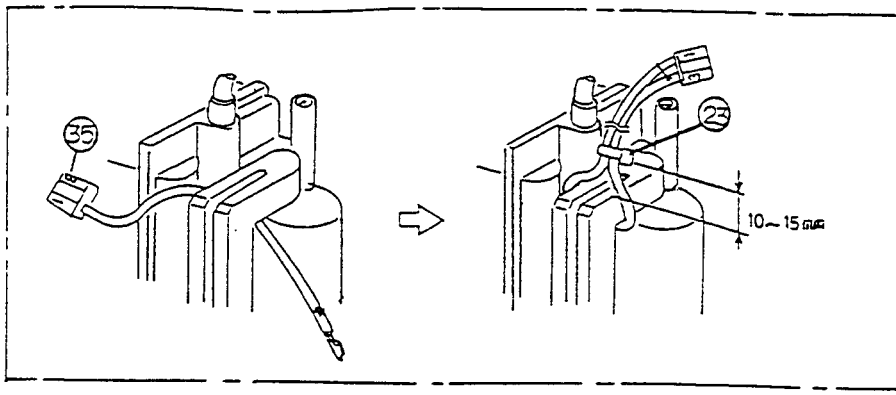
ITC ADJUSTMENT PARTS LIST

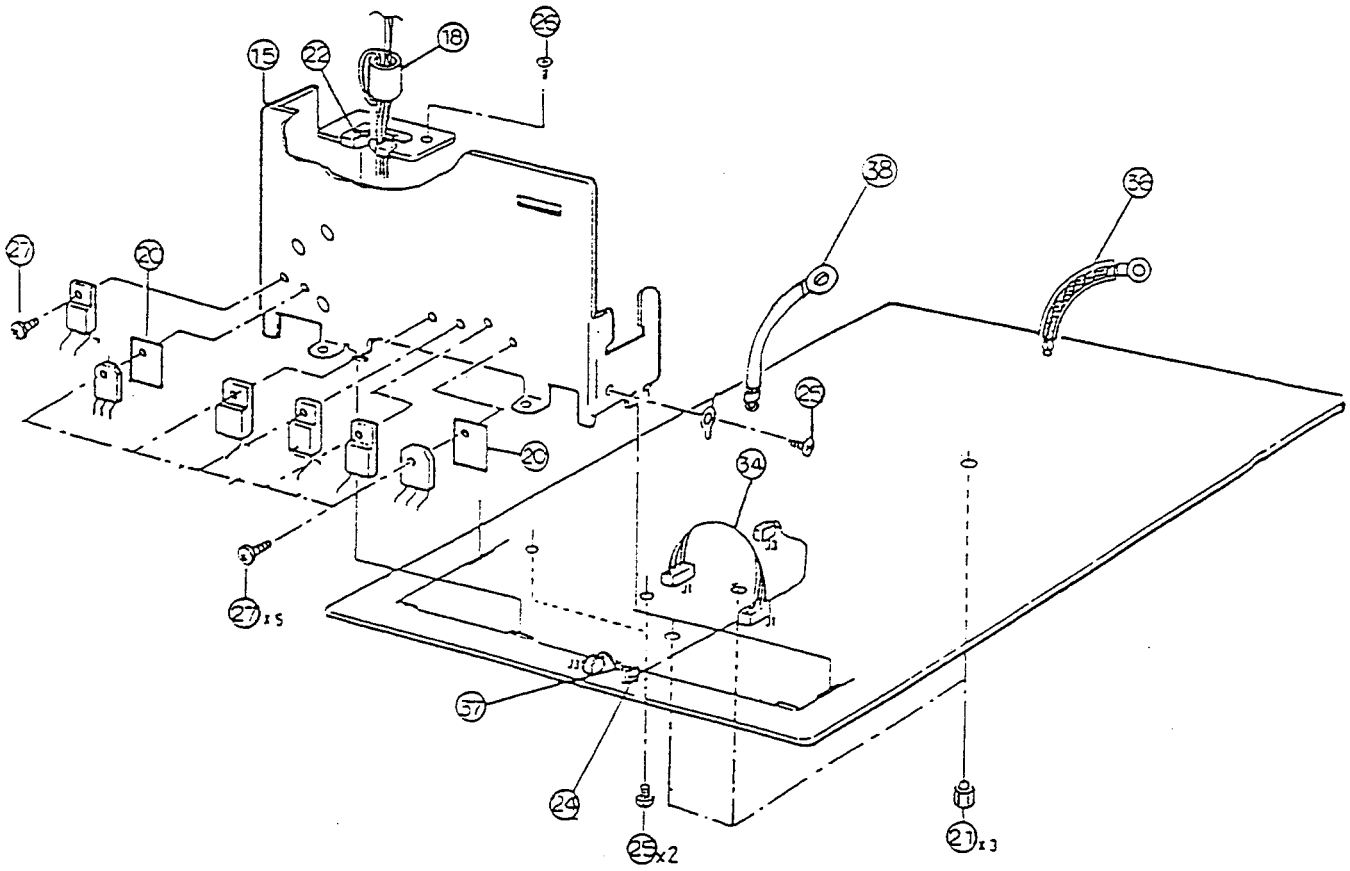
REF. NO.	PART	DESCRIPTION	PART NO.	PRICE(YEN)	REMARK
	YELLOW MAGNET	58861900			
	WHITE MAGNET	58854900			
	FERRITE SHEET	58866400			
	PAINT LOCK	30-10			
	TAPE (BLACK)	CPA-4A(570F)			
	SILICONE	TSE382-W 333g			
	BOND	DN297A			

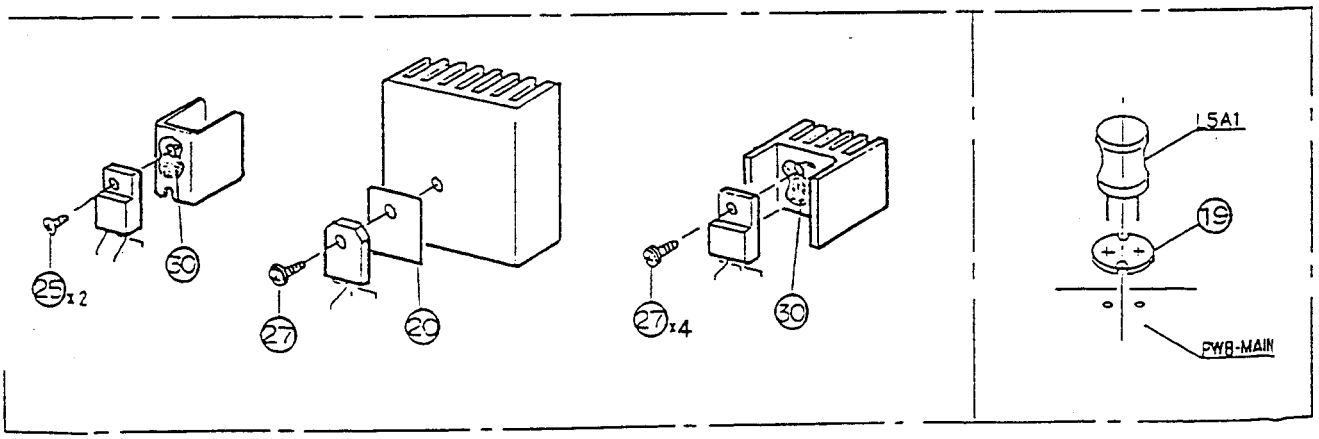
**** Minimum Quantity of Order ****

< PART >		< MINIMUM QUANTITY >
R-CARBON		100
R-METAL		100
R-CEMENT		10
R-COMPOSITION		100
R-FUSE		100
R-NETWORK		10
C-CERAMIC		100
C-ELECTORLYTIC	Below ϕ10.0mm	100
	Above ϕ12.5mm	10
C-POLYPROPYLENE	Below 50V	100
	Above 10V	10
C-STACKED METALLIZED PLASTIC FILM		100
C-TANTALUM		100
CHOKE-COIL		100
LINER-COIL		10
DIODE		100
ZENER-DIODE		100
IC		10
TRANSISTOR	Below 0.9W	100
	Above 1.0W	10
TRANSFORMER		10
VARIABLE RESISTOR		100
CONNECTOR		100
ASSY-ITC(CRT)		1or4
METAL PARTS		5
MOLD PLASTIC PARTS		1
COMPONENT PARTS	·PACKING-CASE	10
	·CUSHION	10
SPACER/CLAMPER		100
SCREW		100
AC-INLET		10
LEAD-CONNECTOR		10
AC-CORD		10
COIL-DEGAUSSING		10

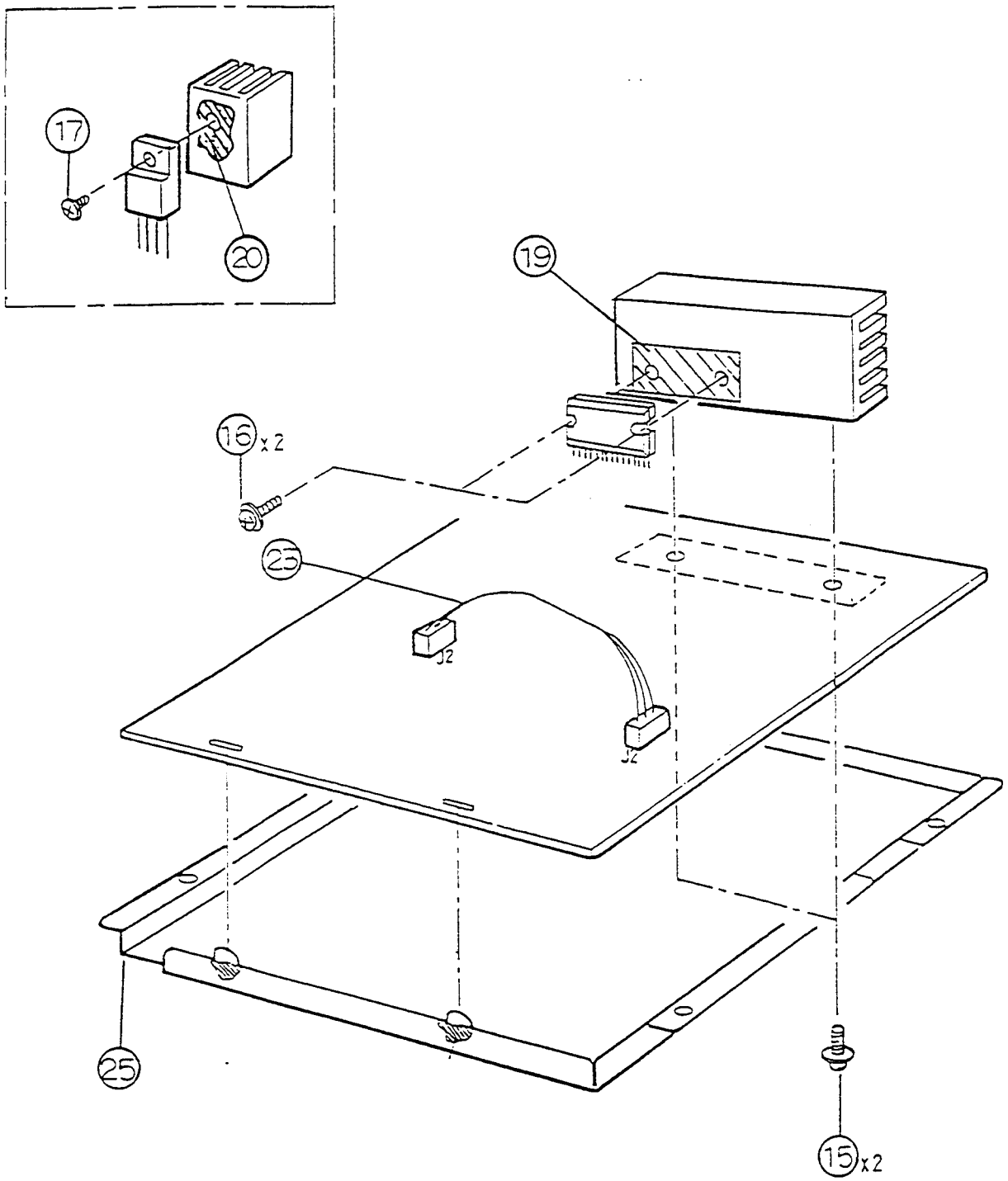
11. EXPLODED VIEW



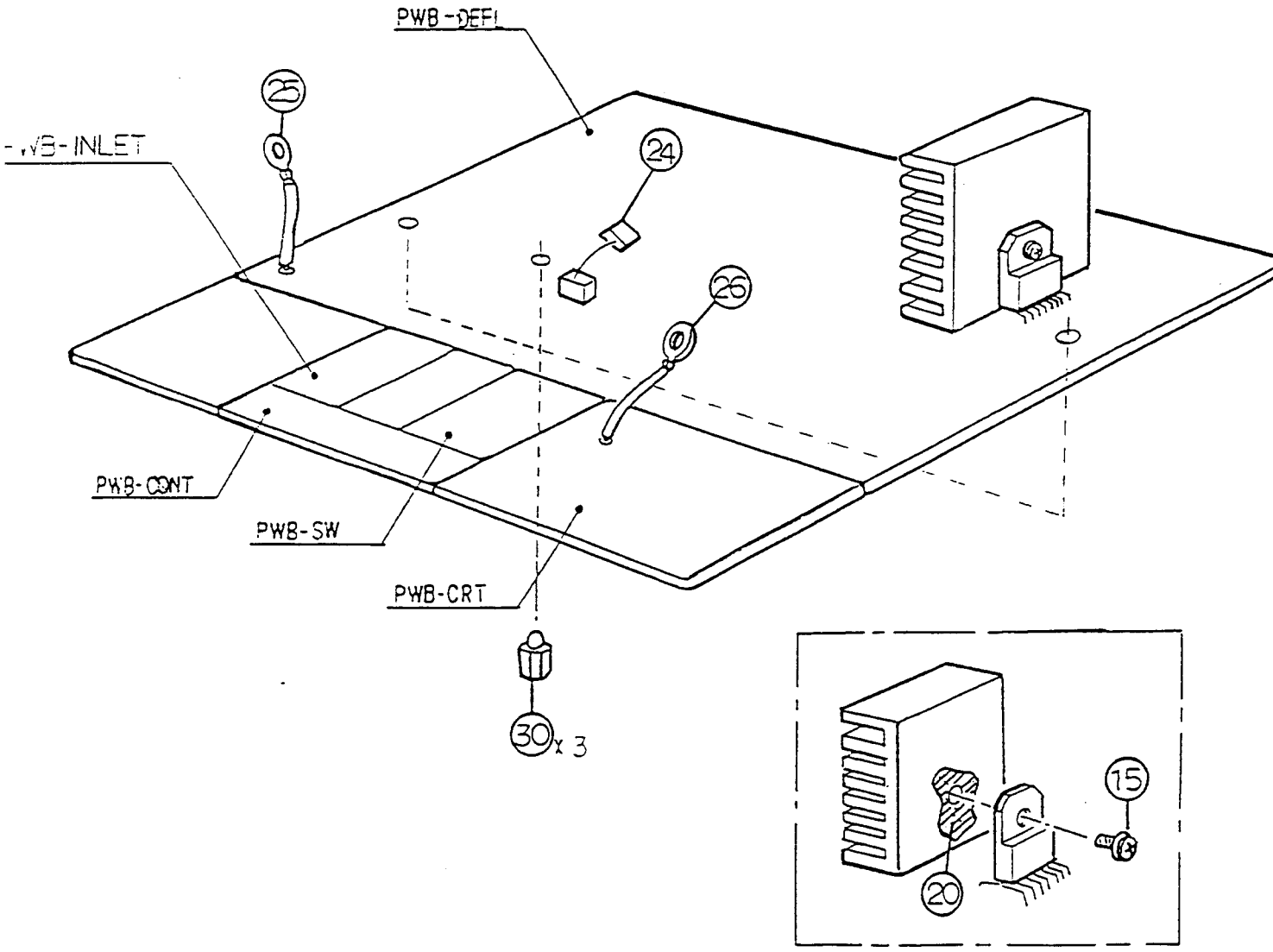




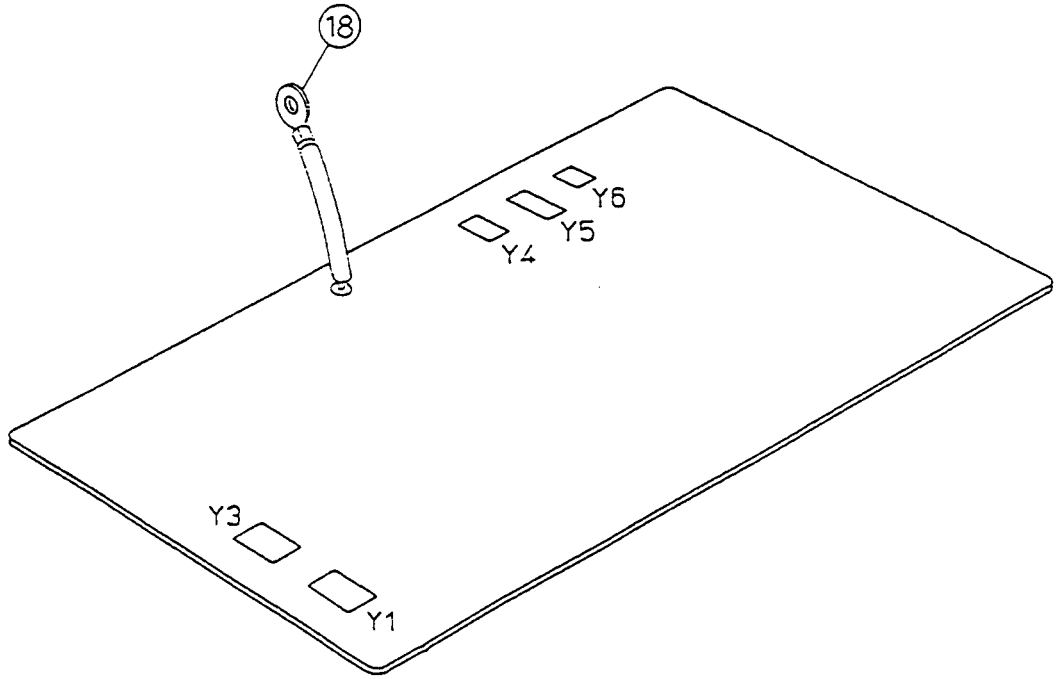
ASSY-PWB-MAIN

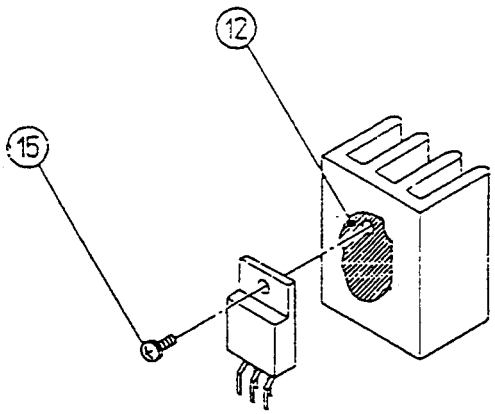


ASSY-PWB-VIDEO

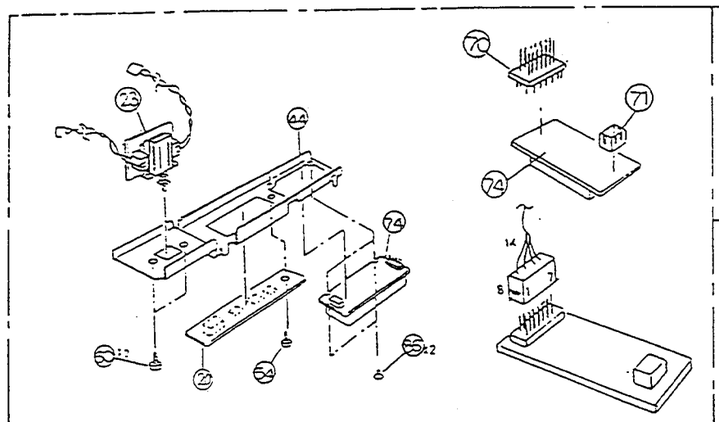


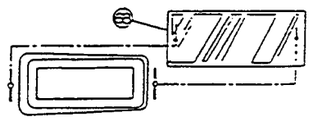
ASSY-PWB-DEFL

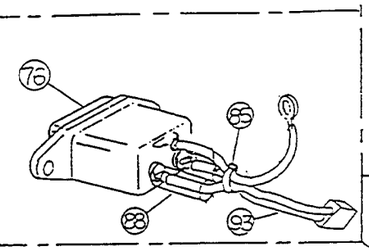


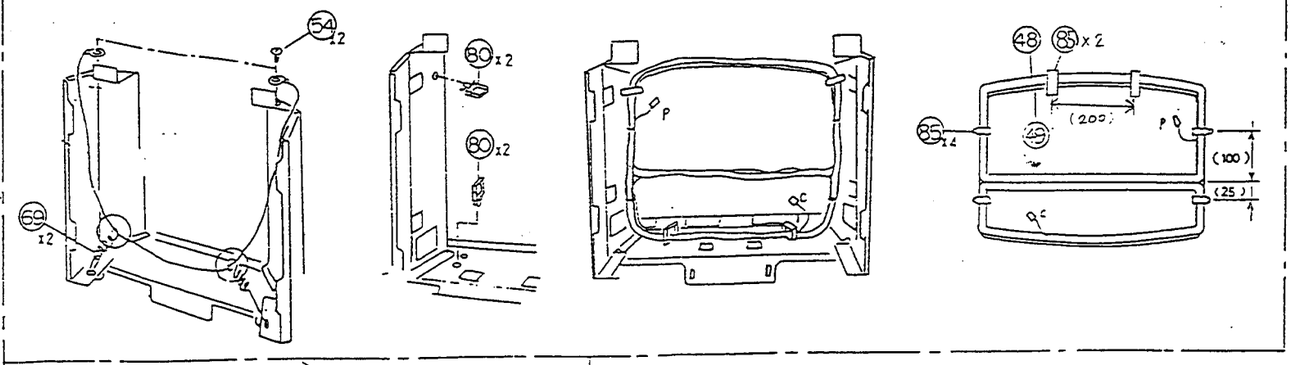


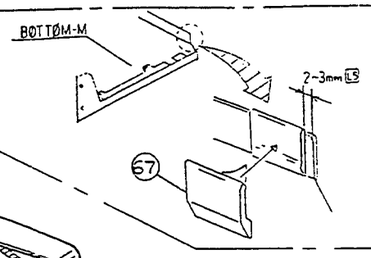
ASSY-PWB-POWER

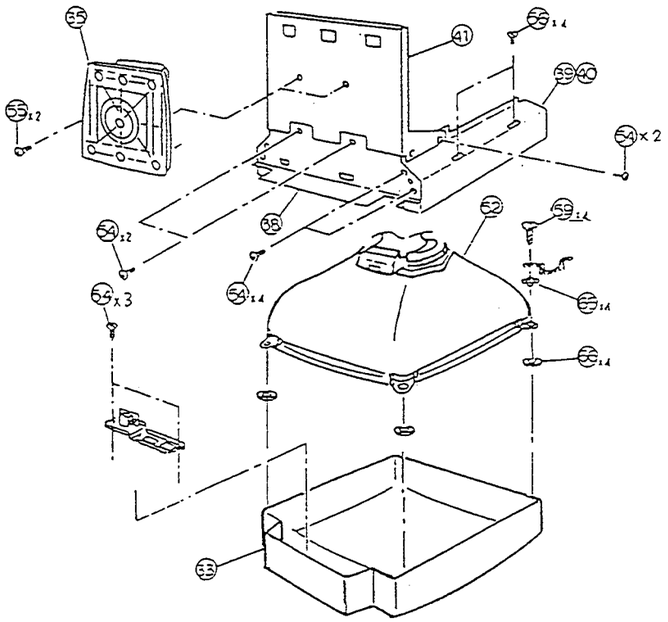


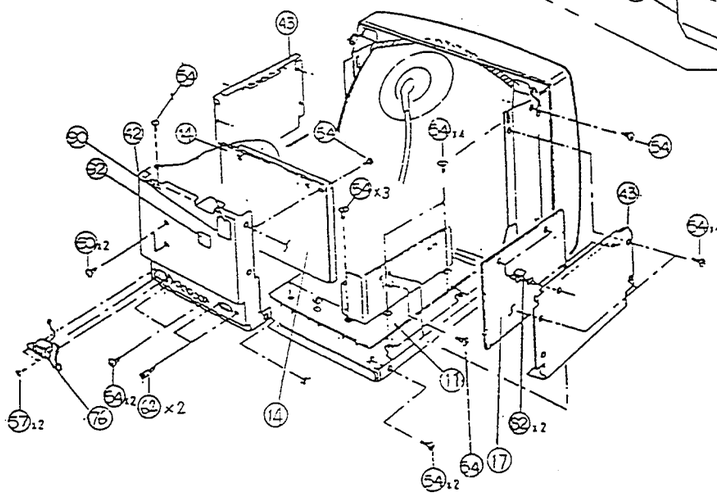


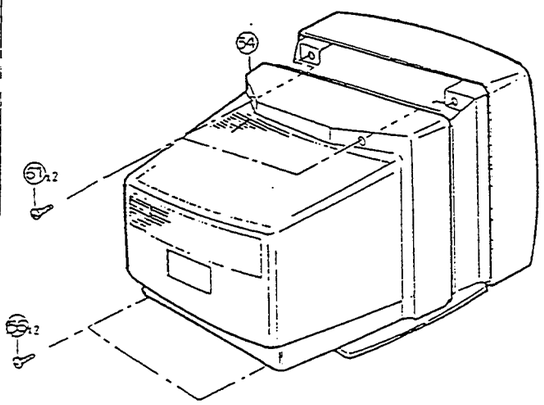


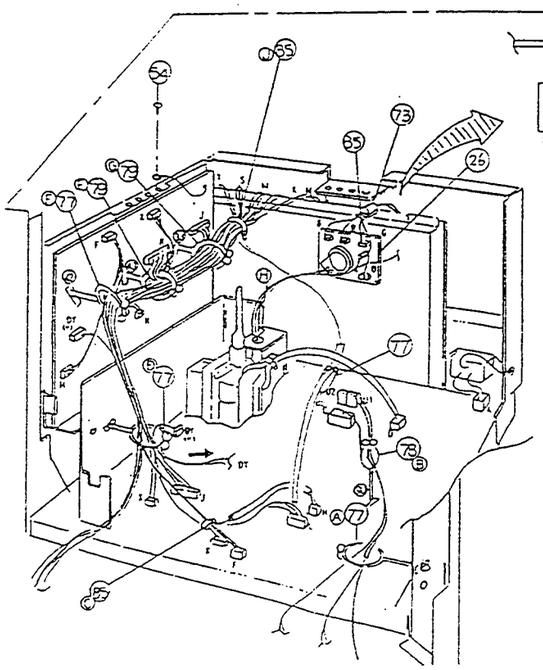




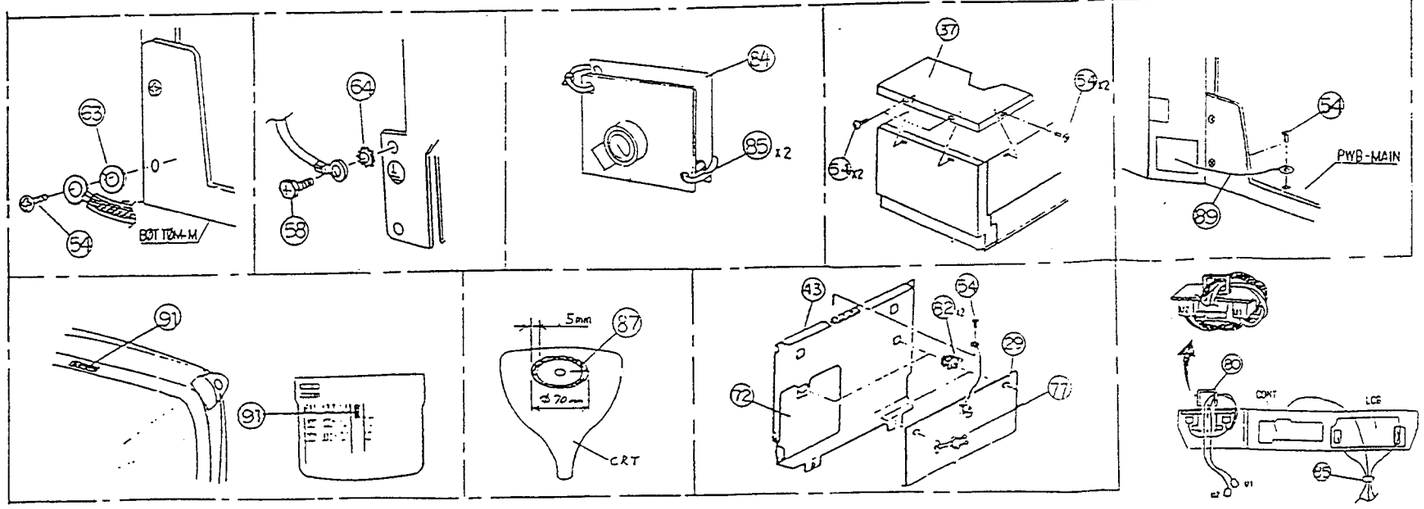




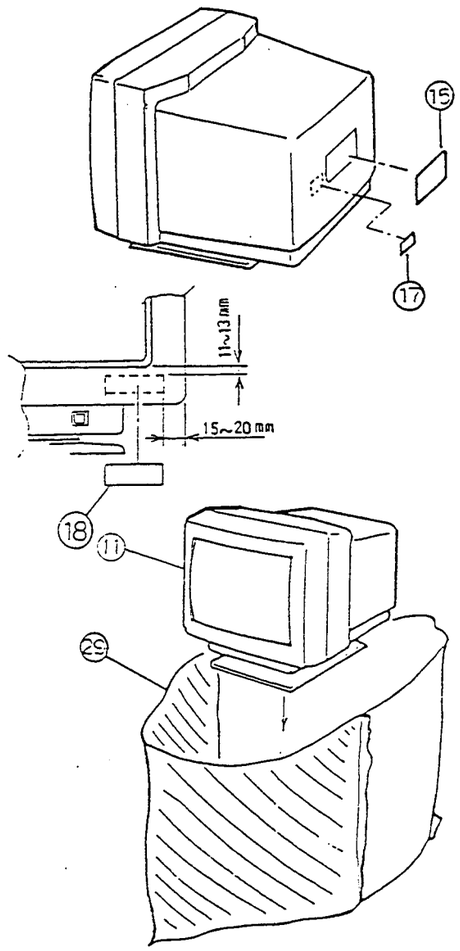


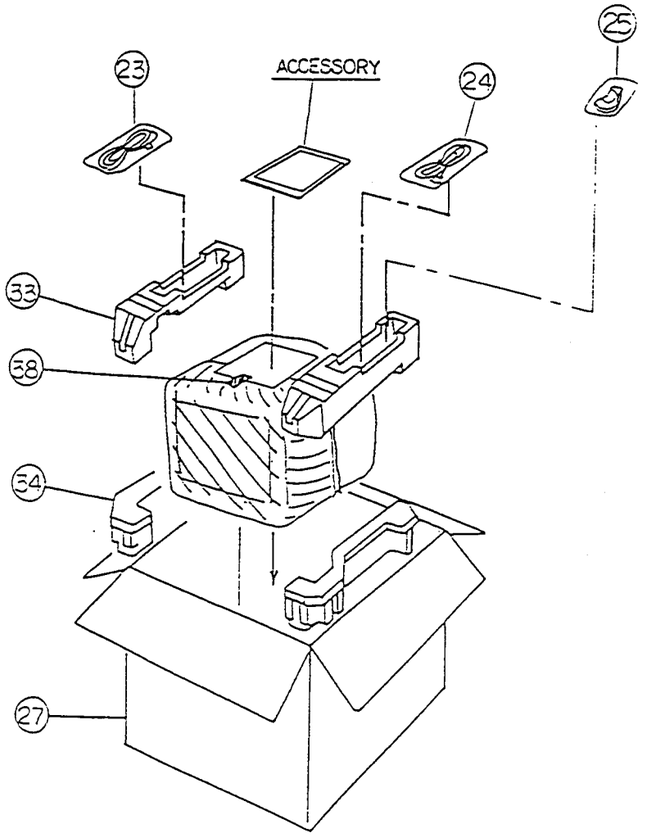


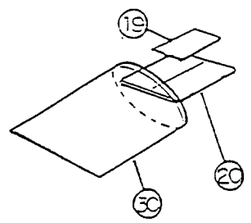
NO	CLAMPING LEAD	ITEM
Ⓐ	U1 U2 C	77
Ⓑ	U1 U2 C	78
Ⓒ	H L F K	85
Ⓓ	H L J F X K S T	77
Ⓔ	L M J X T S K N P	79
Ⓕ	H L M J F X T S K P	77
Ⓖ	L M K S T N P J	79
Ⓗ	FOCUS SCREEN	
Ⓙ	T S N K M L	85



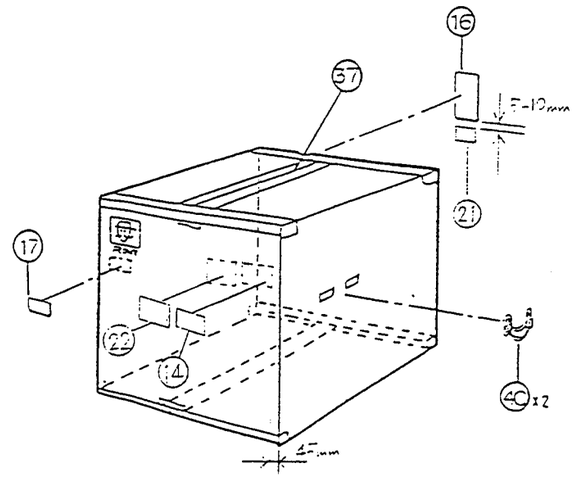
ASSY-MONITOR





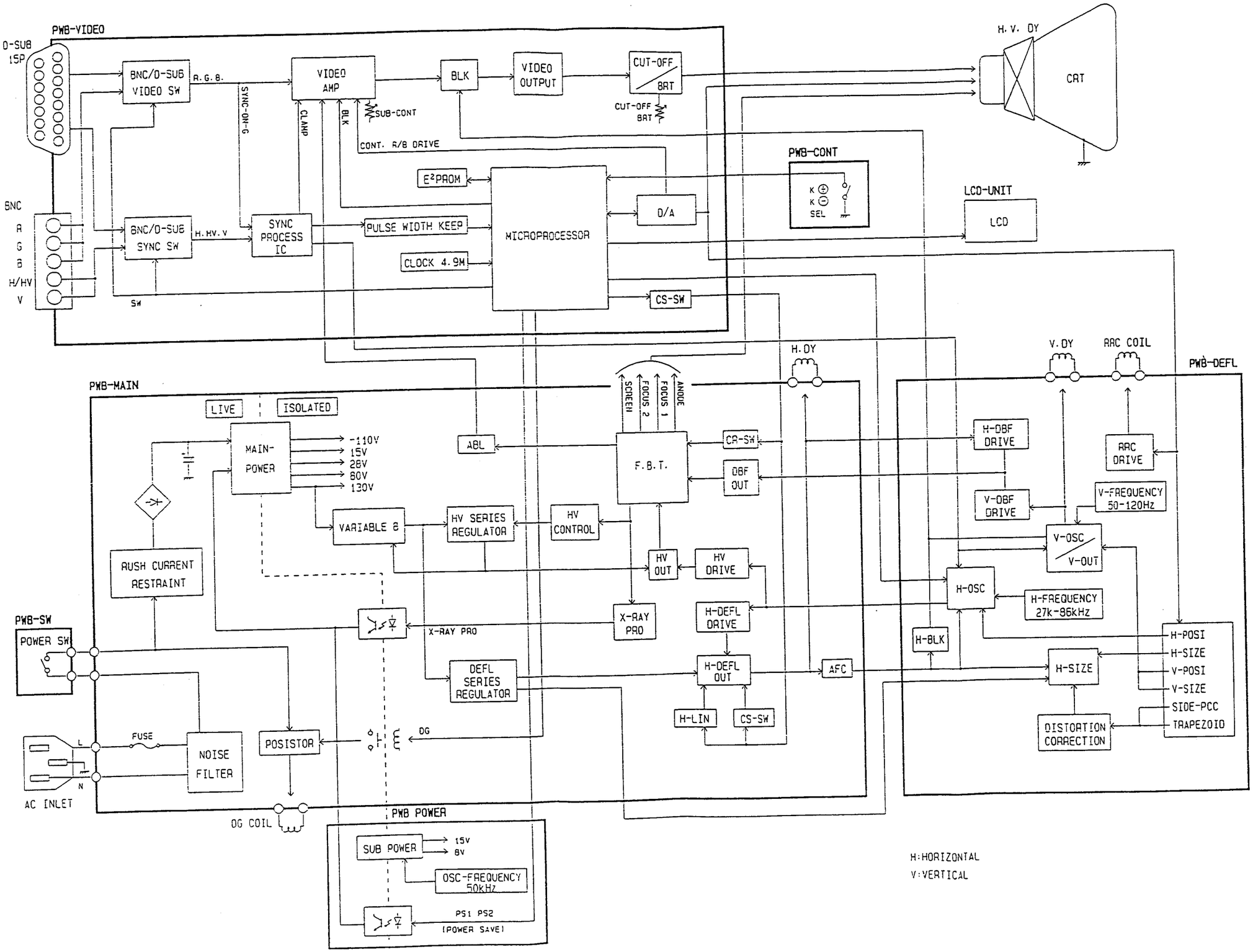


ACCESSORY



ASSY-PACKING

12. DIAGRAMS



H:HORIZONTAL
V:VERTICAL

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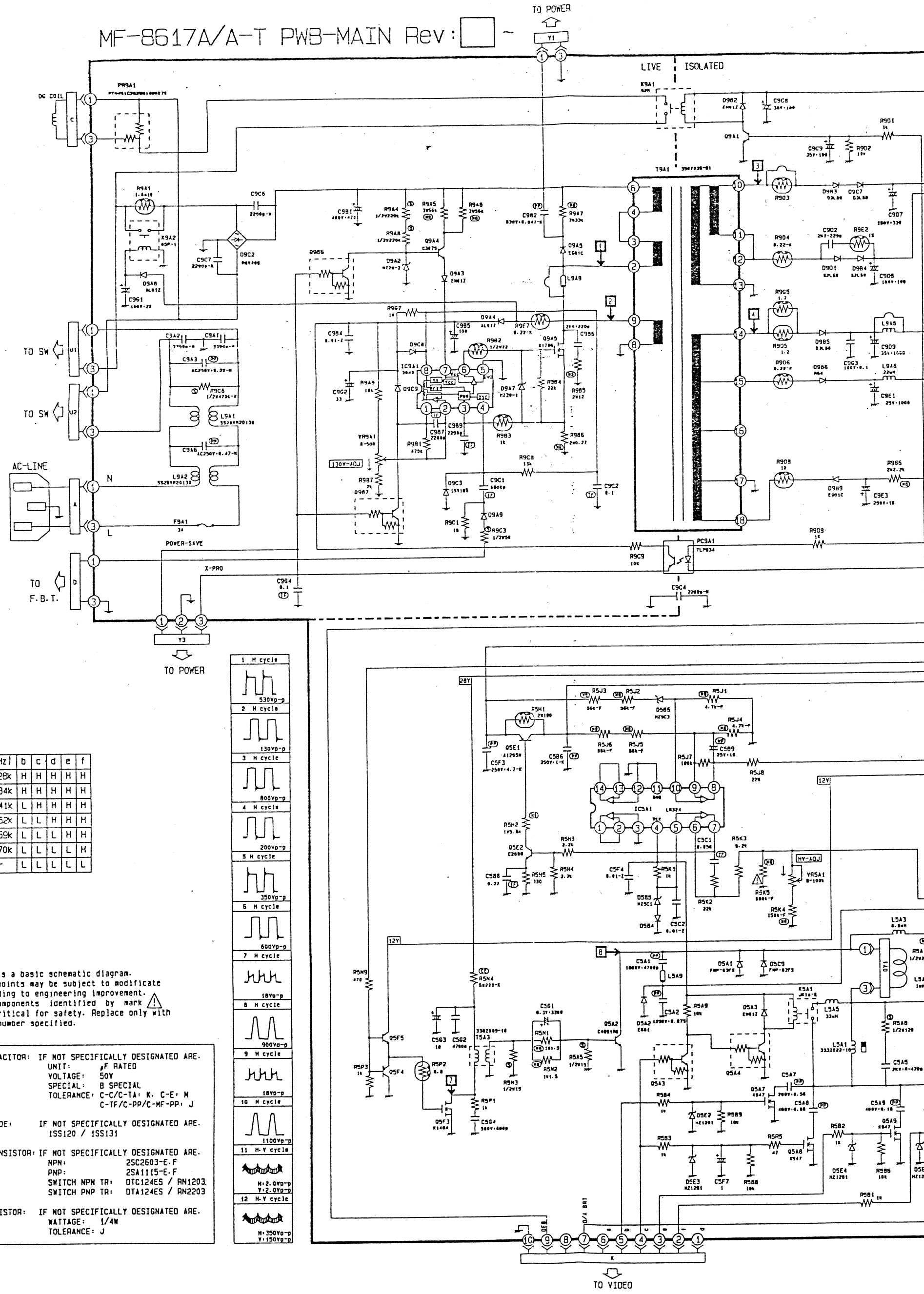


fH (Hz)	b	c	d	e	f
-28k	H	H	H	H	H
28-34k	H	H	H	H	H
34-41k	L	H	H	H	H
41-52k	L	L	H	H	H
52-59k	L	L	L	H	H
59-70k	L	L	L	L	H
70k-	L	L	L	L	L

This is a basic schematic diagram.
Some points may be subject to modificate according to engineering improvement.
The components identified by mark ⚠ are critical for safety. Replace only with part number specified.

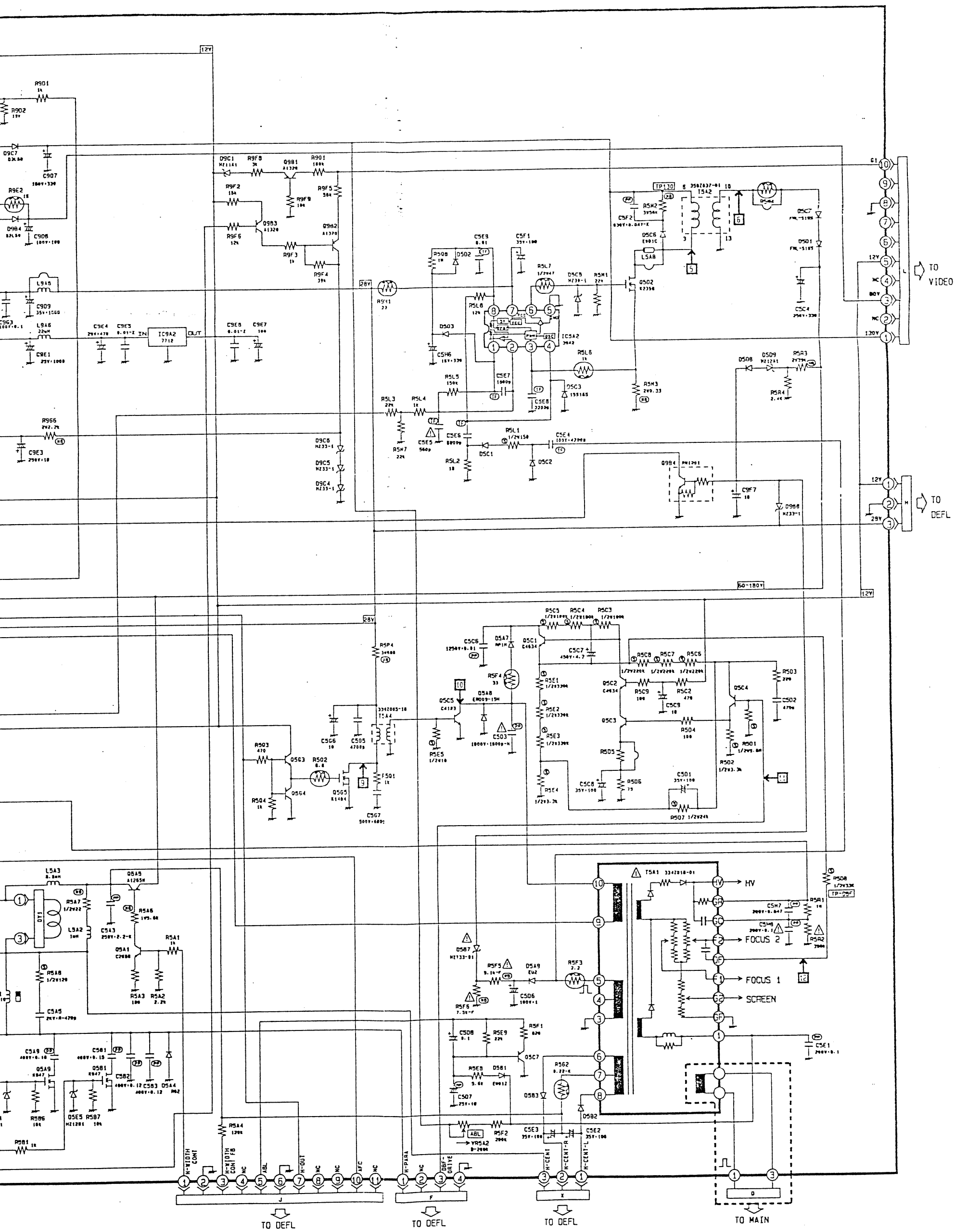
CAPACITOR: IF NOT SPECIFICALLY DESIGNATED ARE.
- UNIT: μF RATED
- VOLTAGE: 50V
- SPECIAL: B SPECIAL
- TOLERANCE: C-C/C-TA: K, C-E: M, C-TF/C-PP/C-MF-PP: J

DIODE: IF NOT SPECIFICALLY DESIGNATED ARE.
- 1SS120 / 1SS131

TRANSISTOR: IF NOT SPECIFICALLY DESIGNATED ARE.
- NPN: 2SC2603-E,F
- PNP: 2SA1115-E,F
- SWITCH NPN TR: DTC124ES / RN1203
- SWITCH PNP TR: DTA124ES / RN2203

RESISTOR: IF NOT SPECIFICALLY DESIGNATED ARE.
- WATTAGE: 1/4W
- TOLERANCE: J

1 H cycle	530Vp-p
2 H cycle	130Vp-p
3 H cycle	800Vp-p
4 H cycle	200Vp-p
5 H cycle	350Vp-p
6 H cycle	600Vp-p
7 H cycle	18Vp-p
8 H cycle	900Vp-p
9 H cycle	18Vp-p
10 H cycle	1100Vp-p
11 H-V cycle	H:2.0Vp-p V:2.0Vp-p
12 H-V cycle	H:350Vp-p V:150Vp-p


12V
28V
R901
R902
D9C7
C907
R9E2
D9B4
C908
L9A5
C909
L9A6
C9E1
C9E4
C9E3
IC9A2
7812
OUT
C9E8
C9E7
R966
C9E3
D9C1
R9F8
Q981
R9F2
R9F9
R9F5
R9F6
Q983
Q982
R9F3
R9F4
R9911
C5E9
C5F1
R5Q8
D502
R5L7
D5C8
R5M1
Q502
R5L6
D503
C5H6
IC5A2
R5L5
C5E7
C5E8
D5C3
R5M3
R5L3
R5L4
R5M7
C5E5
C5E6
R5L1
D5C1
D5C2
R5L2
D9C8
D9C5
D9C4
TP130
T5A2
R5M2
C5F2
D5C6
L5A8
D5C7
D5C4
D5D8
D5D9
R5R3
R5R4
Q984
C9F7
D988
C1
TO VIDEO
TO DEFL
50-180V
R5P4
C5G6
C505
T5A4
R503
Q563
R502
Q564
Q565
F501
R504
C5G7
C5C6
D5A7
Q5C1
C5C7
R5F4
Q5C5
D5A8
C503
R5E5
R5E1
R5E2
R5E3
R5E4
Q5C2
Q5C3
R505
C5C8
R506
C501
R507
Q5C4
R501
R502
R503
C502
L5A3
Q5A5
DY1
L5A2
R5A7
C5A3
R5A6
Q5A1
R5A1
R5A3
R5A2
R5A8
C5A5
C5A9
Q5A9
C581
Q581
C582
C583
D5A4
D5E5
R587
R586
R581
R5A4
H-WIDTH CONT
H-WIDTH CONT FB
NC
ABL
H-OUT
NC
NC
AFC
NC
H-PARA
NC
DEF-DRIVE
TO DEFL
TO DEFL
T5A1 3347818-01
HV
FOCUS 2
FOCUS 1
SCREEN
R508
TP-05F
R5R1
R5R2
C5H7
C5H8
C5E1
D5B7
R5F5
D5A9
R5F3
R5F6
C5D6
R5F1
C5D8
R5E9
D5C7
R562
D581
C5D7
D582
C5E3
C5E2
R5F2
A8L
TO DEFL
TO MAIN

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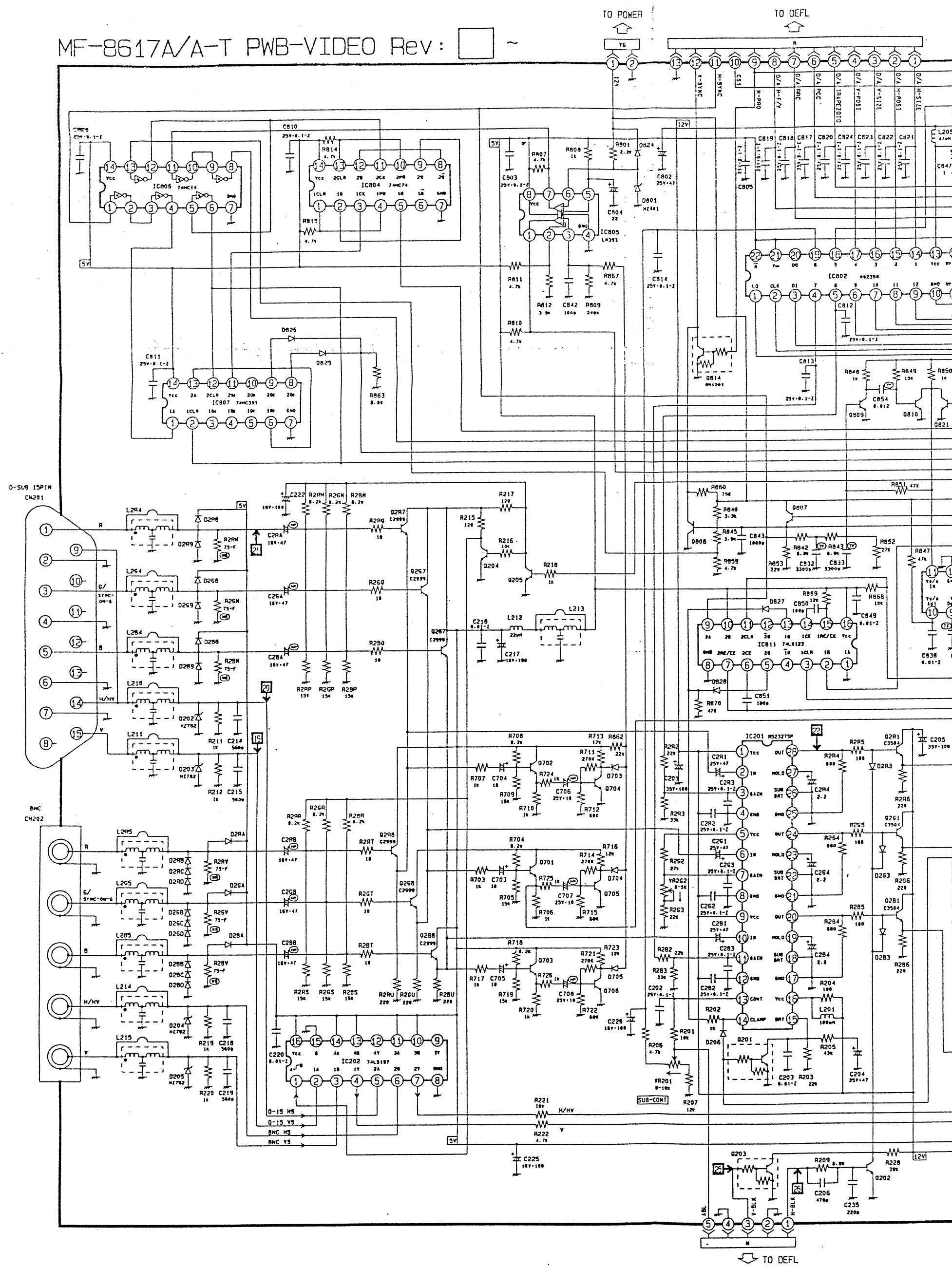

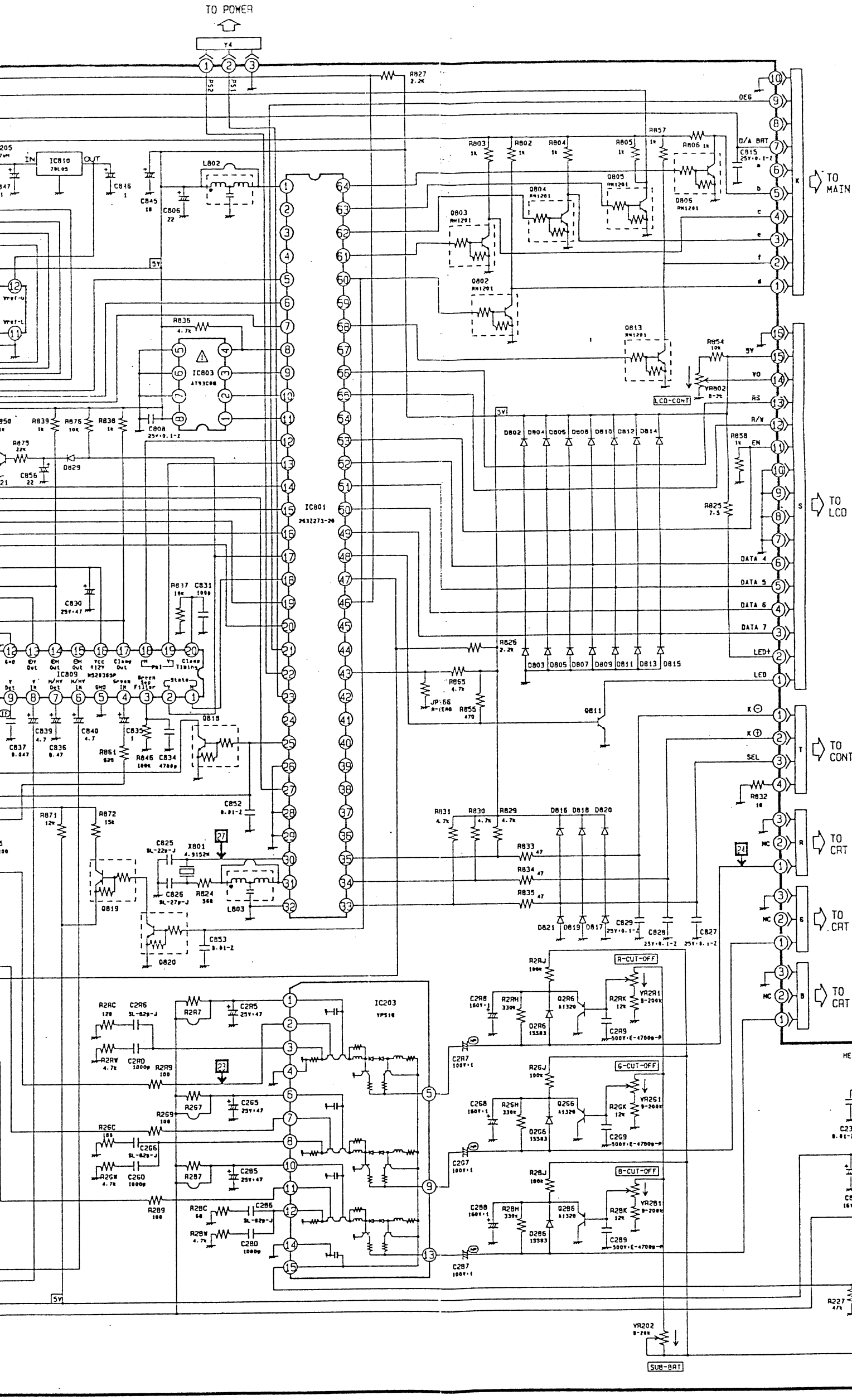

19 V cycle	20 H cycle	21 H cycle
3.0Vp-p	3.0Vp-p	3.0Vp-p
22 H cycle	23 H cycle	24 H cycle
2.5Vp-p	3.3Vp-p	50Vp-p
25 V cycle	26 H cycle	27 4.91MHz
18Vp-p	14Vp-p	3.2Vp-p

CAPACITOR: IF NOT SPECIFICALLY DESIGNATED ARE.
UNIT: μF RATED
VOLTAGE: 50V
SPECIAL: B SPECIAL
TOLERANCE: C-C/C-TA: K, C-E: M
C-TF/C-PP/C-MF-PP: J

DIODE: IF NOT SPECIFICALLY DESIGNATED ARE.
1SS120 / 1SS131

TRANSISTOR: IF NOT SPECIFICALLY DESIGNATED ARE.
NPN: 2SC2603-E,F
PNP: 2SA1115-E,F
SWITCH NPN TR: DTC124ES / RN1203
SWITCH PNP TR: DTA124ES / RN2203

RESISTOR: IF NOT SPECIFICALLY DESIGNATED ARE.
WATTAGE: 1/4W
TOLERANCE: J

COIL/FILTER: MARK ● INDICATES THE INPUT SIDE.

This is a basic schematic diagram.
Some points may be subject to modificate according to engineering improvement.
The components identified by mark ⚠ are critical for safety. Replace only with part number specified.

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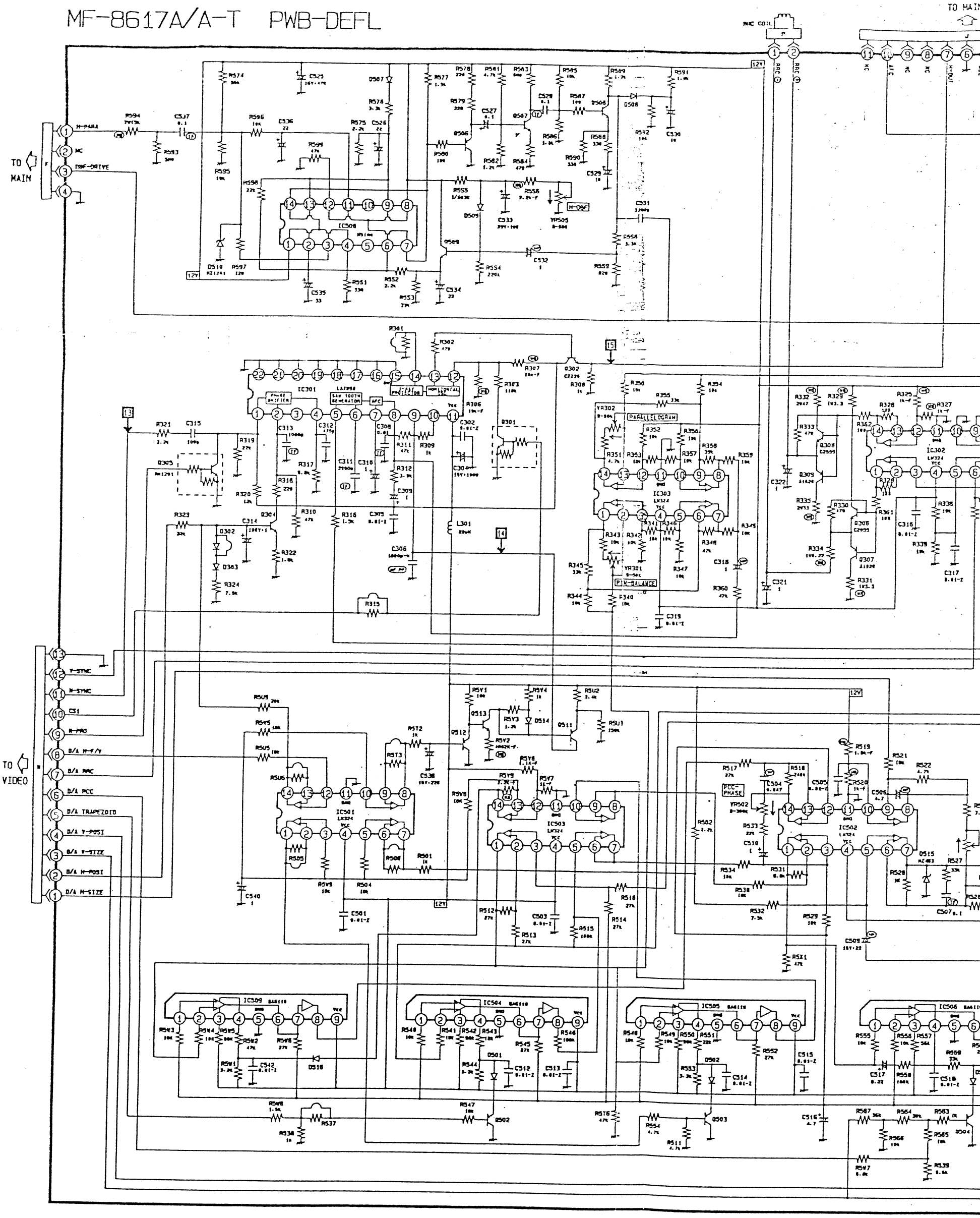

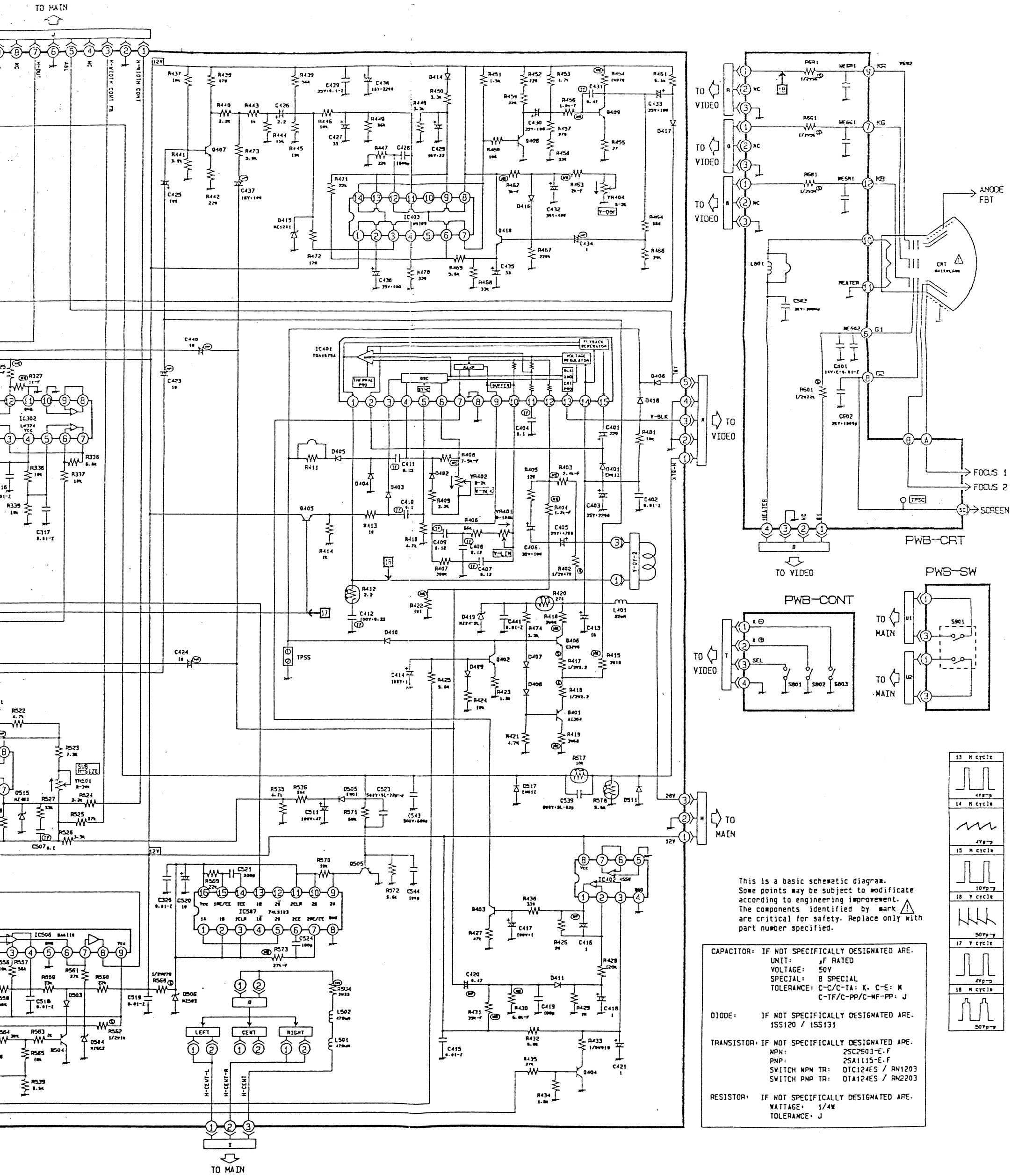

This is a basic schematic diagram.
Some points may be subject to modificate according to engineering improvement.
The components identified by mark ⚠ are critical for safety. Replace only with part number specified.

CAPACITOR:	IF NOT SPECIFICALLY DESIGNATED ARE.	
	UNIT:	μF RATED
	VOLTAGE:	50V
	SPECIAL:	B SPECIAL
	TOLERANCE:	C-C/C-TA: K, C-E: M
		C-TF/C-PP/C-MF-PP: J
DIODE:	IF NOT SPECIFICALLY DESIGNATED ARE.	
	1SS120 / 1SS131	
TRANSISTOR:	IF NOT SPECIFICALLY DESIGNATED ARE.	
	NPN:	2SC2603-E,F
	PNP:	2SA1115-E,F
	SWITCH NPN TR:	DTC124ES / RN1203
	SWITCH PNP TR:	DTA124ES / RN2203
RESISTOR:	IF NOT SPECIFICALLY DESIGNATED ARE.	
	WATTAGE:	1/4W
	TOLERANCE:	J

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